# **INDEX TO VOLUME 72**

## AUTHOR INDEX

#### A

- ABBOTT, R. & NAHORSKI, S.R. A radioreceptor assay using [3H]-muscimol for GABA in human cerebrospinal fluid, 164P
- ADEMBRI, G., GALLI, A., GIOTTI, A. LUZZI, S., SCOTTON, MIRELLA & ZILLETTI, LUCILLA. Interaction of N-acyl and N-sulphonyl derivatives of homotaurine (3-aminopropane-sulphonic acid) with GABA receptor sites and their effects on the central nervous system of the rat, 163P
- ADIGUN, S.A., CLOUGH, D., CONWAY, J. & HATTON, R. Interactions of angiotensin and sympathetic reflexes during lower body negative pressure (LBNP) in the cat, 514P
- ADRIAN, R.W., ISMAIL, S. & JAHN, U. (Introduced by WEETMAN, D.F.) The pharmacological spectrum of binodaline, a novel antidepressant drug, 573P
- ALDEEN, SUSAN I., ELLIOTT, R.C. & SHEARDOWN, M. The partial purification and bioassay of a toxin present in extracts of the sea anemone, *Tealia felina*, 211
- ALDRIDGE, S.J. & MARSDEN, C.A. Effects of pentobarbitone on uptake and release of [<sup>3</sup>H]-dopamine from crude striatal synaptosome preparation, 126P
- ALGERI, S., DESIMONI, M.G., JIRITANO, L. & MISTEREK, K.

  Tolerance and cross-tolerance between D-Ala<sup>2</sup>methionine enkephalinamide and morphine on their
  action on motor behaviour and on the metabolism of
  dopamine and serotonin in some rat brain areas, 156P
- ALI, B.H. & BARTLET, A.L. Some actions of furazolidone in poultry, 555P
- ANDERSON, A.A., ASHFIELD, D.J. & GOADBY, P. A comparison in vitro of guinea-pig central and peripheral airways smooth muscle, 533P
- ANDERTON, BRIAN H, AXFORD, JOHN S, COHN, PETER, MARSHALL, NICHOLAS, J., SHEN, LI & SPRAKE, SALLY. Inhibition of lymphocyte capping and transformation by propranolol and related compounds, 69
- ANGEL, A. & CLARKE, K.A. The effects of trimethadione on penetetrazol-induced discharges of primary muscle spindle afferents from hind limb of the rat, 75
- Annunziato, L., Cerrito, F. & Raiteri, M. Dopamine: spontaneous and drug-evoked release from presynaptic nerve endings of tuberoinfundibular system, 160P
- ANTONELLI, T., BEANI, L., BIANCHI, C., PEDATA, F & PEPEU, G. The effects of electrical stimulation, high K<sup>+</sup> concentrations, atropine and physostigmine on high affinity choline uptake (HACU) in guinea-pig brain slices, 148P
- APUD, J.A., CASANUEVA, F., CIVATI, C., COCCHI, D., LOCATELLI, V., MÜLLER, E.E. & RACAGNI, G. Central nervous system derived GABA influences plasma GABA concentrations and prolactin secretion, 150P
- Arbilla, Sonia, Briley, M., Cathala, Françoise, Langer, S.Z., Pornin, Claudie & Raisman, Rita. Parallel changes in [3H]-imipramine binding sites in cat

- brain and platelets following chronic treatment with imipramine, 154P
- ARBILLA, SONIA, KAMAL, LINDA A. & LANGER, S.Z. Amphetamine inhibits the electrical stimulation-evoked release of [3H]-dopamine from the rabbit caudate nucleus, 499P
- ARENDT, J., HO, A.K., LAUD, C., MARSTON, A., NOHRIA, V., SMITH, J.A. & SYMONS, A.M. Differential effect of benserazide(Ro4-4602) on the concentration of indoleamines in rat pineal and hypothalamus, 257
- ARMSTRONG, J.M., CAVERO, I. & LEFEVRE-BORG, FRAN-COISE, Comparison of the bradycardia produced by oxymetazoline and clonidine in anaesthetized rats, 107P
- ARMSTRONG-JAMES, M., FOX, K., KRUK, Z.L. & MILLAR, J. 'Dident' carbon fibre micro-electrodes for electrophysiological and electrochemical studies, 507P
- ASHFIELD, D.J. see ANDERSON, A.A., 533P
- AUNIS, DOMINIQUE., & GARCÍA, ANTONIO G. Correlation between catecholamine secretion from bovine isolated chromaffin cells and [<sup>3</sup>H]-ouabain binding to plasma membranes, 31
- AXFORD, JOHN S. see ANDERTON, BRIAN H., 69

## В

- Babbini, M., Bartoletti, M. & Gaiardi, M. Behavioural effects of chlorpromazine and chlordiazepoxide in rats: qualitative or quantitative differences? 167P
- BACK, D.J., BRECKENRIDGE, A.M., CHAPMAN, C. ROSE-MARY, CRAWFORD, FRANCESCA E., ORME M.L'E. & Rowe, P.H. Intestinal absorption of oestrone sulphate in the rat, 541P
- Metabolism of norethisterone oenanthate in vitro, 538P
- BACQ, Z.M., DEBY, C., DEBY-DUPONT, G. & LAVERGNE, L. Sensitivity to arachidonic acid and the metabolism of purines in the rabbit, 521P
- BAIRD, A.W. & MAIN, I.H.M. Effects of sodium replacement and ouabain on rat gastric mucosal potential difference, 562P
- BAKHLE, Y.S. Inhibition by clinically used dyes of prostaglandin inactivation in rat and human lung, 715
- Balfour, D.J.K. & Benwell, M.E.M. The effects of chronic nicotine administration and withdrawal on 5-hydroxytryptamine synthesis and uptake by rat brain synaptosomes, 490P
- Balfour, D.J.K. & Plummer, S.M. The effects of zimeldine on changes in brain 5-hydroxyindoles and plasma corticosterone following chronic treatment with morphine, 572P
- Bandinelli, R., Franconi, Flavia, Giotti, A., Martini, F., Moneti, G., Stendardi, Isabella, & Zilletti, Lucilla. The positive inotropic effects of taurine and calcium and the levels of taurine in ventricular strips, 115P
- BARBAT, J. & WARRINGTON, S.J. Effects of cimetidine and

- ranitidine on some non-invasive indices of cardiac function, 131P
- BARLOW, R.B., DAWBARN, D. & PYCOCK, C.J. A comparison of stereospecificity at central and peripheral 'muscarine-sensitive' acetylcholine receptors: observations with the enantiomeric forms of procyclidine and tricyclamol, 277
- BARLOW, R.B. & WINTER, ELIZABETH A. Affinities of the protonated and non-protonated forms of hyoscine and hyoscine N-oxide for muscarinic receptors of the guinea-pig ileum and a comparison of their size in solution with that of atropine, 657
- BARTHOLEYNS, J., FOZARD, J.R. & PRAKASH, N.J. Dexamethasone inhibition of carrageenan paw oedema in the rat requires *de novo* synthesis of putrescine, 182P
- BARTHOLINI, G., LLOYD, K.G. SCATTON, B. & WORMS, P. Cortical influences on striatal function in the rat, 128P
- BARTLET, A.L. see Ali, B.H., 555P
- BARTOLETTI, M. see BABINI, M., 167P
- BARTOLINI, A., BARTOLINI, R., BISCINI, A., GIOTTI, A. & MALMBERG, P. Investigations into baclofen analgesia: effect of naloxone, bicuculline, atropine and ergotamine. 156P
- BARTOLINI, R. see BARTOLINI, A., 156P
- BATCHELOR, K.W. & STANWORTH, D.R. The effects of nonidet P40 on the function of rat peritoneal mast cells in vitro, 95
- BATES, R.F.L., BUCKLEY, G.A., EGLEN, R.M. & STRETTLE, R.J. Comparison of the analgesic effects of subcutaneous and intra-cerebroventricular injection of calcitonin on acetic acid-induced abdominal constrictions in the mouse. 575P
- BATES, R.F.L., BUCKLEY, G.A. & STRETTLE, R.J. Evidence for a novel mechanism of action of salmon calcitonin on indomethacin-induced gastric erosions, 559P
- BAUER, V. Distribution and types of adrenoceptors in guinea-pig ileum: the action of  $\alpha$ -and  $\beta$ -adrenoceptor agonists, 201
- BEANI, L. see ANTONELLI, T., 148P
- BEANI, L., BIANCHI, C. & SINISCALCHI, A. Naloxone reversal of morphine inhibition of electrically-evoked acetylcholine from guinea-pig thalamus in vitro, 158P
- Bell, G.D., Clegg, R.J., Cohn, M.R. Duggleby, J.E., Ellis, W.R., Macdonald, I.A., Middleton, B. & White, D.A. Terpene therapy for gallstones effects of individual monoterpenes on bile flow, bile composition and hepatic cholinesterogenesis in the rat, 104P
- BELLEROCHE, J.S. de & BRADFORD, H.F. Evidence for an inhibitory presynaptic component of neuroleptic drug action, 427
- BEN-HARARI, R.R. & YOUDIM, M.B.H. Ontogenesis of uptake and deamination of 5-hydroxytryptamine and β-phenylethylamine in isolated perfused lung and lung homogenates from rats, 731
- Bennett, G.W. & Keeling, M. H<sub>2</sub>-mediated histamine induced released of thyrotrophin releasing hormone from hypothalamic synaptosomes: a neuroendocrine role for histamine, 151P
- BENNETT, P.N., NOTARIANNI, LIDIA J. & SUPRADIST, SUMARN. Effects of sotalol on lignocaine pharmacokinetics in rat, 540P
- BENONI, G., BERTAZZONI-MINELLI, E., FRACASSO, M.E. & LEONE, R. Biliary excretion of β-lactamines in rats: in vitro and in vivo determination, 185P

- BENWELL, M.E.M. see BALFOUR, D.J.K., 490P
- BERNARDINI, C., DEL TACCA, M., MARTINOTTI, E. & SOLDANI, G.  $\beta_2$ -Adrenoceptor agonists inhibit gastric acid secretion in Shay rats, 177P
- BERTACCINI, G. & CORUZZI, G. Effect of impromidine (SK&F 92676) on the isolated papillary muscle of the guinea-pig, 197
- BERTACCINI, G., DE CASTIGLIONE, R. & SCARPIGNATA, C. Effect of substance P and its natural analogues on gastric emptying of the conscious rat, 221
- BERTACCINI, G. & SCARPIGNATO, C. Effects of some cholecystokinin(CCK)-like peptides on gastric emptying of a liquid meal in the rat, 103P
- BERTAZZONI-MINELLI, E. see BENONI, G., 185P
- BERTI, F., FOLCO, G.G., OMINI, G., ROSSONI, G. VIGANO,
   T. Relationships between bronchoconstriction and thromboxane A<sub>2</sub> formation in the guinea-pig: effect of aspirin, 140P
- Bertolasi, V., Borea, P.A., Gilli, G. & Sacerdoti, M. Structure-activity relationships in histamine H<sub>1</sub>-receptor antagonists, 175P
- BHALLA, P. & MARSHALL, I. Post-junctional location of histamine receptors in mouse and rabbit vasa deferentia, 171P
- BHARGAVA, HEMENDRA N. The effect of melanotrophin release inhibiting factor(MIF) and cyclo(Leu-Gly) on the tolerance to morphine-induced antinociception in the rat: a dose-response study, 707
- BHARGAVA, K.P., DIXIT, K.S. & GUPTA, Y.K. Enkephalin receptors in the emetic chemoreceptor trigger zone of the dog, 471
- BHARGAVA, K.P., PANT, K.K. & TANGRI, K.K. Role of α-adrenoceptors in the spinal cord in myocardial infarction-induced cardiac arrhythmias, 192P
- BIANCHELLI SOLDAINI, G. & BUFFONI, F. Histochemistry of porcine tissues using antibodies to pig plasma amine oxidase, 146P
- BIANCHETTI, G. BOUTROY, M.J., DUBRUC, C., MORSELLI, P.L. & VERT, P. Placental transfer and pharmacokinetics of acebutolol and N-acetyl acebutolol in the newborn, 135P
- BIANCHI, C. see ANTONELLI, T., 148P
- BIANCHI, C. see BEANI, L., 158P
- BIANCHI PORRO, G., CARUSO, I., CIABATTONI, P., PATRIGNANI, P., PATRONO, C. & PUGLIESE, F. Comparative effects of aspirin and diflunisal on platelet and gastric prostaglandin-synthetase in humans, 141P
- BIGON, E. BRUNI, A., MIETTO, L., TARJAN, E.M. & TOF-FANO. Lysophosphatidylserine-induced mast cell activation in vivo, 108P
- BILLINGHAM, M.E.J. ICI 55897(CLOZIC), a novel antiarthritic agent, 523P
- BILLINGHAM, M.E.J., CLAGUE, R.B., MORGAN, K. & SMITH, M.N. Effect of ICI 55897(CLOZIC) and indomethacin on type II collagen-induced arthritis in the rat, 551P
- BILSKI, ALISON J., COLLIS, M.G. & PETTINGER, S.J. Heterogeneity of post-junctional purinergic receptors in cardiac and vascular tissue from guinea-pigs, 587P
- BIRCH, N.J., FOSTER, G. & KAJDA, P.K. Effects of lithium and calcium on manganese activated pyruvate kinase, 506P
- BIRCH, N.J., KAJDA, P.K. & WAREING, ROSEMARY. Lithium and glucose utilization in human erythrocytes, 576P
- BIRMINGHAM, A.T., ROLAND, J., WHARRAD, HEATHER J.,

- WILLIAMS, E.J. & WILSON, C.G. Effects of atenolol and propranolol on finger tremor, 134P
- BISCINI, A. see BARTOLINI, A., 156P
- BITTENSKY, LUCILLE, CASHMAN, B., CHAYEN, J., HENDERSON, B., HIGGS, G.A., SALMON, J.A. & VANE, J.R. Synthesis of arachidonate cyclo-oxygenase products by rheumatoid and non-rheumatoid synovial tissue, 522P
- BIZZI, A. see CHIESARA, E., 181P
- BLACKWOOD, D.H.R., MARTIN, M.J. & PALOMO, T. (Introduced by McQEEN, J.K.) Changes in cGMP in amygdaloid kindling in rats, 500P
- BLACKWELL, G.J., CARNUCCIO, R., DI ROSA, M., FLOWER, R.J. & PARENTE, L. Storage and steroid-induced release from rat leucocytes of a phospholipase inhibitor, 136P
- BLAIR, I.A. & MACDERMOT, J. The binding of [<sup>3</sup>H]prostacyclin to membranes of a neuronal somatic hybrid, 435
- BLANDINA, P., FANTOZZI, R., MANNAIONI, P.F., & MASINI, EMANUELA. Muscarinic cholinoceptors in rat mast cells: demonstration by direct binding, 109P
- Bold, J.M., Dean, H.G., Ingham, S. & Spraggs, C. Spironolactone and the effect of propranolol in DOCA/salt treated rats, 509P
- BOLTON, T.B. & CLARK, J.P. Actions of various muscarinic agonists on membrane potential, potassium efflux, and contraction of longitudinal muscle of guinea-pig intestine, 319
- BOREA, P.A. see BERTOLASI, V., 175P
- BORKOWOSKI, K.R. & CLOUGH, D.P. Adrenaline-induced cardiovascular depressor effects in conscious dogs, 520P
- BOROKOWSKI, K.R., HICKS, P.E. & MOORE, R.A. Effects of indapamide on the responses to electrical stimulation of *in vitro* preparations from rat, 172P
- BOTTING, J.H. Spurious effects of commercial preparations of oxytocin on the isolated vas deferens of the rat, 101
- BOUDOT, J.P., CAVERO, I. & FEUVRAY, D. Further studies on the effects of diltiazem on the rabbit isolated heart perfused with an oxygenated or hypoxic solution: correlation between ultrastructural and mechanical effects, 190P
- BOUTROY, M.J. see BIANCHETTI, G., 135P
- BOWERY, N.G., SHAW, J.S., TURNBULL, M.J. & WARRING-TON, RUTH. Inhibitors of neuronal GABA uptake potentiate the inhibitory effect of GABA on fieldstimulated guinea-pig vas deferens preparation, 142P
- BOWMAN, ANNE, GILLESPIE, J.S. & MARTIN, W. Actions on the cardiovascular system of an inhibitory material extracted from the bovine retractor penis, 365
- BOYLE, F.C. & DIGGES, K.G. Adrenoceptors in pregnant rat uterus, 530P
- Bradford, H.F. see Belleroche, J.D. de, 427
- Bradshaw, C.M., Gaszner, P. & Szabadi, E. Comparison of the peripheral anticholinergic activities of DL-308, a potential new neuroleptic, of thioridazine and atropine in healthy volunteers, 131P
- Brambilla, G., Carlo, P. Finollo, R., Giaretti, W., Martelli, A., Pala, M., Parodi, S. & Taningher, M. An extremely sensitive new method of evaluating DNA damage induced by mutagens and carcinogens, 186P
- BRAMBILLA, G., CAVANNA, M. DE FLORA, S., PARODI, S. PINO, A. & ROBBIANO, L. DNA-damaging and mutagenic activity of five hydrazine derivative monoamine oxidase inhibitors, 145P
- BRAY, M.A., CUNNINGHAM, F.M., FORD-HUTCHINSON,

- A.W. & SMITH, M.J.H. Leukotriene B<sub>4</sub>: a mediator of vascular permiability, 483
- Breckenridge, A.M. see Back, D.J., 538P
- see BACK, D.J., 541P
- Brezenoff, H.E., Caputi, A.P., Carney, K., Lampa, E., Marmo, E. & Rossi, F. Role of brain acetylcholine in reflex control in the conscious rat, 170P
- BRIGONZI, A., CLEMENTI, F., CONTI TRUCONI, B., FUMAGALLI, G. & SHER, E. Acetylcholine receptor degradation in rat myotubes *in vitro*; effect of myasthenia sera and of drugs used in the treatment of myasthenia gravis, 110P
- Briley, M. see Arbilla, Sonia, 154P
- Briley, M.S., Langer, S.Z. & Pimoule, Carmen. Changes in [3H]-clonidine binding after short-term surgical denervation of rat submaxillary gland, 179P
- Briley, M., Langer, S.Z., Raisman, Rita, Sechter, D. & Zarifian, E. High affinity binding of [<sup>3</sup>H]-imipramine to human platelets: differences between untreated depressed patients and healthy volunteers, 152P
- Bristow, D.R., Hare, J.R., Hearn, J.R. & Martin, L.E. (Introduced by Brittain, R.T.) Radioligand binding studies using [<sup>3</sup>H]-cimetidine and [<sup>3</sup>H]-ranitidine, 547P
- Broadley, Kenneth J. & Nicholson, C. David. Dissociation constants of isoprenaline and orciprenaline and their relative efficacies on guinea-pig isolated atria determined by use of an irreversible β-adrenoceptor antagonist, 635
- BROUGHTON-SMITH, N.K. & WHITTLE, B.J.R. The gastric antisecretory actions of prostaglandin E<sub>2</sub> and stable prostacyclin analogues against different secretagogues in perfused whole stomachs of rat or mouse in vitro, 291
- Brown, Janette M. & Pollock, D. The effect of reserpine on plasma corticosterone levels and on the incorporation of [<sup>3</sup>H]-thymidine into regenerating liver in partially hepatectomized rats, 542P
- Bruni, A. see Bigon, E., 108P
- Bruno, F., Carenzi, A., Frigeni, V., Iuliano, E., Pet-Rogalli, R. & Racagni, G. Differences in the development of tolerance to morphine and D-Ala<sup>2</sup>-methionineenkephalin in two inbred strains of mice, 166P
- BRYAN, A.J., RABINDER, KAUR, ROBINSON, G., THOMAS, N.W. & WILSON, C.G. Changes in the rat intestine exposed to polyethylene glycol 2000 and polyoxyethylene (40) stearate, 557P
- BUCKETT, W.R. Tolerance to the inhibition by morphine of bradycardia induced by vagal stimulation in the rat, 584P
- BUCKLEY, G.A. see BATES, R.F.L., 559P
  - see Ватеs, R.F.L., 575Р
- Buffoni, F. see Bianchelli Soldaini, G., 146P
- BUFFONI, F., CORRIAS, M. & PIRISINO, R. Inhibition of noradrenaline uptake by N-methyl-benzylamine, 173P
- BUNCE, K.T., PARSONS, M.E., PRICE, C.A. & SYKES, C.C. Histidine decarboxylase activity in the isolated gastic mucosa of the rat, 561P
- BURGESS, C.D. see JOHNSTON, A., 135P
- Burnstock, G., Coutts, A.A., Greaves, M.W. & Jorizzo, J. Mechanism of vasodilatation due to adenosine triphosphate and its metabolites in humans, 516P
- Burton, M.J., Cooper, S.J. & Popplewell, D.A. The effect of fenfluramine on the microstructure of feeding and drinking in the rat, 621

c

CALLANAN, K. & KEENAN, A.K. The presynaptic effects of isoprenaline, D600 and dantrolene in rat atria, 191P

CAPARROTTA, L., FASSINA, G., GAION, R.M. & TESSARI, F., Age-related changes in antilipolitic action of nicotinic acid, 106P

CAPUTT, A.P. see Brezenoff, H.E., 170P

CARENZI, A. see BRUNO, F., 166P

CARLO, P. see BRAMBILLA, G., 186P

CARLSÓÓ, B. DANIELSSON, Å., HENRIKSSON, R. & IDAHL, L.-Å. Characterization of the rat parotid βadrenoceptor, 271

CARNEY, J.M. & SIROCHMAN, VICKI L. Stereospecific dextrorphan tolerance in rats, 245

CARNEY, K. see Brezenoff, H.E., 170P

CARNUCCIO, R. see BLACKWELL, G.P. 136P

CARPENTER, J.R. Intrinsic activity of labetalol on guineapig trachealis muscle *in vitro*, 532P

CARPI, C., DORIGOTTI, L. & SEMERARO, C. Cadralazine and its identified metabolites: comparative effects on blood pressure and on arterial smooth muscle. 188P

CARUSO, I. see BIANCHI PORRO, G., 141P

CASAMENTI, F., CORRADETTI, R., MORONI, F. & PEPEU, G. The efflux of endogenous GABA and glutamate from the rat parietal cortex in vivo, 149P

CASHMAN, B. see BITTENSKY, LUCILLE, 522P

CASNUEVA, F. see APUD, J.A., 150P

CATHALA, FRANÇOISE see ARBILLA, SONIA, 154P

CAVANNA, M. see Brambilla, G., 145P

CAVERO, I., see ARMSTRONG, J.M., 107P

CERRITO, F. see ANNUNZIATO, L., 160P

CERRITO, F. & RAITERI, M. Dopamine reuptake as a major feedback mechanism controlling dopamine synthesis, 127P

CESERANI, R., FAUSTINI, F., LONGIAVE, D., MIZZOTTI, B. & POZZI, O. 11-deoxy-13,14-didehydro-16S-methyl-PGE<sub>2</sub> (K11550), a new antiulcer agent, 178P

CHADWICK, M. ANN, FRANCIS, HILARY P. & GOADY, P. The effects of anaphylaxis on stomach motility in the guineapig, 536P

CHAND, N. 5-Hydroxytryptamine induces relaxation of goat pulmonary veins: evidence for the noninvolvement of M and D-tryptamine receptors, 233

CHAPMAN, C. ROSEMARY see BACK, D.J., 538P

— *see* Васк, D.J., 541Р

CHAYEN, J. see BITTENSKY, LUCILLE, 522P

CHIESARA, E., CLEMENTI, F., BIZZI, A., COVA, D., MARA-BINI, L. & DELLA TORRE, P. Long-term feeding of rats with semi-synthetic diets substituted in protein components: effect on kidney and liver, 181P

CHIU, A., ECCLESTON, D. & PALOMO, T. (Introduced by ASHTON, H.) Dopaminergic super-sensitivity and cyclic GMP in rat striatum, 495P

CIABATTONI, P. see BIANCHI PORRO, G., 141P

CIVATI, C. see APUD, J.A., 150P

CLAGUE, R.B. see BILLINGHAM, M.E.J., 551P

CLARK, AMANDA L. & HOBBIGER, F. Effects of acetylcholine antagonists on anticholinesterase-induced twitch potentiation in the rat isolated diaphragm preparation, 545P

CLARK, J.P. see BOLTON, T.B., 319

CLARK, L.A., SMALL, R.C. & TURNBULL, M.J. Do the recurrent laryngeal nerves provide an extrinsic input to non-adrenergic inhibitory neurones in guinea-pig trachealis muscle? 554P

 Nicotine-induced relaxation of guinea-pig trachealis, 530P

CLARKE, K.A. see ANGEL, A., 75

CLEGG, R.J. see BELL, G.D., 104P

CLEMENTI, F. see BRIGONZI, A., 110P

CLEMENTI, F. see CHIESARA, E., 181P

CLOUGH, D. see ADIGUN, S.A., 514P

CLOUGH, D.P. see BORKOWSKI, K.R., 520P

CLOW, A., GOMMEREN, W., JENNER, P., LEYSEN, J., MARS-DEN, C.D. & THEODOROU, A. Continuous administration of trifluperazine to rats for six months only alters cerebral dopamine receptor characteristics, 569P

COCCHI, D. see APUD, J.A., 150P

COCCHI, D., MARTINEZ-CAMPOS, A., MÜLLER, E.E. & ZANARDI, P. Neuroendocrine studies in rat model mimicking Huntington's disease, 151P

Coccia, P., Croci, T. & Manara, L. Less TCDD persists in liver 2 weeks after a single dose to mice fed chow with added charcoal or cholic acid, 181P

COHN, M.R. see BELL, G.D., 104P

COHN, PETER see AXFORD, JOHN S., 69

COKER, SUSAN J., LEDINGHAM, I. MCA., PARRATT, J.R. & ZEITLIN, I.J. Aspirin inhibits the early myocardial release of thromboxane B<sub>2</sub> and ventricular ectopic activity following acute coronary occlusion in dogs, 593

COLEMAN, R.A., COLLINGTON, E.W., GEISOW, H.P., HORN-BY, E.J., HUMPHREY, P.P.A., KENNEDY, I., LEVY, G.P., LUMLEY, P., McCABE, P.J. & WALLIS, C.J. AH 19437, a specific thromboxane receptor blocking drug? 524P

COLLINGTON, E.W. see COLEMAN, R.A., 524P

COLLIS, M.G. see BILSKI, ALISON J., 587P

COLPEART, F.C. & MAROLI, A.N. Detection of electrical stimulation the medial forebrain bundle at the level of the lateral hypothalamus: effects of haloperidol and cocaine on the intensity gradient, 489P

CONFORTI, A., FRANCO, L., MILANINO, R. & VELO, G.P. Serum copper concentration and ceruloplasmin activity during carrageenan foot oedama in rat, 137P

CONSTANTI, A. & NISTRI, A. L-Cysteate mimics the action of L-aspartate on lobster muscle, 113P

CONTE-CAMERINO, D. & MITOLO-CHIEPPA, D. Effects of emetine on rat skeletal muscle fibres after chronic application to the nerve, 112P

CONTI TRONCONI, B. see BRIGONZI, A., 110P

CONWAY, J. see Adigun, S.A., 514P

COOPER, S.J. see BURTON, M.J., 621

CORRADETTI, R. see CASAMENTI, F., 149P

CORRIAS, M. see BUFFONI, F., 173P

CORTESE, I., CRISTINO, R. & CUOMO, V. Behavioural effects induced by low doses of methylmercury in rats, 168P

CORUZZI, G. see BERTACCINI, G., 197

COSTA, J.L., KIRK, K.L., MURPHY, D.L. & STARK, H. Anomalous compartmentation of 5-hydroxytryptamine in intact human platelets, 449

COSTALL, B., NAYLOR, R.J. & NEUMEYER, J.L. A dissociation of dopamine agonist and antagonist binding sites in the rat striatum, 568P

COSTALL, B., NAYLOR, R.J. & SAHOUN, H.A. Catecholamines have a dual action on stomach strips: the relaxation component is selectively inhibited by domperidone, 558P

COUTTS, A.A. see BURNSTOCK, G., 516P

COVA, D. see CHIESARA, E., 181P

COX, B., ENNIS, C. & KEMP, J.D. Inhibitory 5hydroxytryptamine receptors located on dopamine nerve terminals in the rat striatum, 491P

Cox, B., Lee, T.F. & Martin, D. Different hypothalamic receptors mediate 5-hydroxytryptamine- and tryptamine-induced core temperature changes in the rat, 477

CRAGGS, M.D., HODSON, STEPHANIE G. & STEPHENSON, J.D. An in vitro and in vivo comparison of the effects of cholinoceptor blockade on cat and baboon urinary bladders. 176P

CRAWFORD, FRANCESCA E. see BACK, D.J., 538P

- see BACK, D.J., 541P

CRISTINO, R. see CORTESE, I., 168P

CROCI, T. see COCCIA, P., 181P

CUMAN, R., GIRALDI, T., LASSIANI, L., NISI, C. & SAVA, G., Mechanism of the antileukaemic action of dimethyltriazenes in mice, 107P

CUNNINGHAM, F.M. see Bray, M.A., 483

CUOMO, V. see CORTESE, I., 168P

CURRUBA, M.O., MANTEGAZZA, P., MÜLLER, E.E., & RIC-CIARDI, S. Effects of anorectic drugs on hyperphagic response induced by insulin or 2-deoxy-d-glucose glucoprivation, 161P

CURWAIN, B.P. & TURNER, N.C. Gastric acid secretion in the rabbit isolated mucosa, 560P

CUSACK, N.J. & HOURANI, S.M.O. 5'-N-ethylcarboxamidoadenosine: a potent inhitor of human platelet aggregation, 443

#### D

D'AMICO, K.M., DAVIS, S.S., FRIER, M., HANSRANI, P., HARDY, J.G. & WILSON, C.G. Effects of emulsifiers on the elimination of intravenously-administered fat emulsions measured by gamma scintigraphy, 180P

DALL'OLIO, R., GANDOLFI, O. & MONTANARO, N. Neurotoxic lesion of the median raphe nucleus protects rats from electroconvulsive shock-induced retrograde amnesia of passive avoidance conditioning, 169P

Daly, M.J., Humphray, Janet M., & Stables, R. Antagonism of vasodepressor and gastric secretory responses to histamine by the H<sub>2</sub>-receptor antagonists, ranitidine and cimetidine, in the anaesthetized dog, 55

 Some in vitro and in vivo actions of the new histamine H2-receptor antagonist, ranitidine, 49

DANIELSSON, A. see CARLSÖÖ, B., 271

DASCOMBE, M.J. & PARKES, J. Effects of N<sup>6</sup>-2'-O-dibutyryl adenosine 3'5'-monophosphate on body temperature in the restrained rat, 565P

Davis, J. Selective depression of synaptic excitation in cat spinal neurones by baclofen: an iontophoretic study, 373

DAVIS, S.S. see D'AMICO, K.M., 180P

DAWBARN, D. see BARLOW, R.B., 277

DAWBARN, D., HARMAR, A.J. & PYCOCK, C.J. Behavioural and biochemical studies following injection into substantia nigra of rat, 493P

DE CARO, G., MASSI, M. & MICOSSI, L.G. Effects of criniaangiotensin II on drinking behaviour of rats and pigeons, 162P

DE CASTIGLIONE, R., see BERTACCINI, G., 221

DE FLORA, S. see BRAMBILLA, G., 145P

DE MEY, J. & VANHOUTTE, P.M. Removal of endothelium and arterial reactivity to acetylcholine and adenine nucleotides, 510P

DE POVER, A., GODFRAIND, T. & TONA LUTETE, N. Interaction of potassium with the two ouabain specific binding sites in guinea-pig heart microsomes, 513P

De Schaepdryver, A.F., De Smet, F., Fraeyman, N.H. & Singh, P. Dopamine-β-hydroxylase activity in cerebrospinal fluid and serum of rabbits after electroconvulsive shock, 567P

DE SMET, F. see DE SCHAEPDRYVER, A.F., 567P

DEAN, H.G. see BOLD, J.M., 509P

DEBY, C. see BACQ, Z.M., 521P

DEBY-DUPONT, G. see BACQ, Z.M., 521P

DEL BIANCO, P.L., FANCIULLACCI, M. & SICUTERI, F. Local (iris, vein) pharmacological tests in morphine addiction, 174P

DEL TACCA, M. see BERNARDINI, C., 177P

DELLA CORTE, LAURA, GIOVANNINI, MARIA GRAZIA, MARTINI, P., MEGAZZINI, IRENE, PULITI, ROBERTA, SCARAGLI, G.P., & WONDRAK, GLORIA. *In vivo* N-dealkylation of chlorpromazine and chlorimipramine: a single-dose kinetic study in the rat, 184P

DELLA TORRE, P., see CHIESARA, E., 181P

DESARMENIEN, M., FELTZ, P., HEADLEY, P.M. & SAN-TANGELO, FRANCESCA. SL 75 102 as a γ-aminobutyric acid agonist: experiments on dorsal root ganglion neurones *in vitro*, 355

DESIMONI, M.G. see ALGERI, S., 156P

DEVANE, J. & RYAN, M.P. The effects of amiloride and triamterene on urinary magnesium excretion in conscious saline-loaded rats, 285

DI GIULIO, A.M., GROPPETTI, A. & MANTEGAZZA, P. Effect of reserpine on Met-enkephalin-like material concentrations in rat adrenal gland, 146P

DI GIULIO, A.M., MANTEGAZZA, P., PANERAI, A. & PERAL-TA, E. Effect of hyperprolactinemia on  $\beta$ -endorphin and Met-enkephalin concentrations in brain and pituitary, 167P

DI ROSA, M. see BLACKWELL, G.J. 136P

Dickinson, K.E.J., Nahorski, S.R. & Willcocks, A.L. Serotonin recognition sites are labelled in cerbral cortex by the β-adrenoceptor antagonist [125I]-hydroxybenzylpindolol, 165P

DIEU, D. & GODFRAIND, T. A comparison of flunarizine and cinnarizine, 583P

DIGGES, K.G. see BOYLE, F.C., 530P

DIXIT, K.S. see BHARGAVA, K.P., 471

DOCHERTY, J.R., MADJAR, H. & STARKE, K. An investigation of pre- and postsynaptic  $\alpha$ -adrenoceptors in the rabbit hind limb, 120P

DONCKIER, J. & GODFRAIND, T. Reduction by creatinol O-phosphate of heart CPK loss after coronary artery ligation in rats, 578P

DORIGOTTI, L. see CARPI, C., 188P

DRESSE, A. & SCUVÉE-MOREAU, J. Effect of various adrenoceptor agonists and antagonists on the spontaneous firing rate of rat locus coeruleus cells, 498P

DUBOCOVICH, MARGARITA L., GALZIN, ANNE-MARIE & LANGER, S.Z. Presynaptic dopamine like inhibitory receptors on the noradrenergic nerve endings of the rabbit hypothalamus, 497P

DUBRUC, C. see BIANCHETTI, G., 135P

DUGGLEBY, J.E. see BELL, G.D., 104P

DUONG, A.T., GODFRIED, T. & WIBO, M. Sub-cellular localization of two forms of amine oxidase in rat aorta, 510P

DURANT, NICHOLAS N. & LAMBERT, JEREMY J. The action of polymyxin B at the frog neuromuscular junction, 41

E

ECCLESTON, D. see CHIU, A., 495P

EDGAR, ELAINE G., GILBERT, J.C. & WINSEY, N.J.P. Disodium cromoglycate and mast cell calcium-adenosine triphophatase, 549P

EGLEN, R.M. see BATES, R.F.L., 575P

EL TAHIR, K.E.H. & WILLIAMS, K.I. Lipoxygenase products derived from blood elements within decidua of the rat pregnant uterus inhibit myometrial prostacyclin formation, 138P

ELLIOTT, R.C. see ALDEEN, Susan I., 211

ELLIOT, R.C. Studies on the interaction of methohexitone and suxamethonium or acetylcholine on chick biventer cervicis preparation, 111P

ELLIS, W.R. see BELL, G.D., 104P

Ennis, C. see Cox, B., 491P

EVANS, M.H. & WILLIAMSON, NICOLA M. Attenuation of the rabbit hypothalamo-cardio-inhibitory response by α-adrenoceptor blocking drugs, 515P

F

FADLOUN, Z. & LEACH, G.D.H. Effect of chemical sympathectomy on the changes in adrenergic function caused by chronic Cd<sup>2+</sup> treatment in rats, 117P

 The effects of Cd<sup>2+</sup> on the responsiveness of the rat isolated perfused kidney to periarterial stimulation, noradrenaline and potassium ions, 189P

FAIRBAIRN, J.W. & PICKENS, JOAN T. Activity of cannabis in relation to its Δ'-trans tetrahydro-cannabinol content, 401

FANCIULLACCI, M. see DEL BIANCO, P.L., 174P

FANTOZZI, R. see BLANDINA, P. 109P

FASSINA, G. see CAPARROTTA, L., 106P

FAUSTINI, F. see CESERANI, R., 178P

FELDBERG, W. & SILVA, M. ROCHA E. JR., Inhibition of vasopressin release to carotid occlusion by y-aminobutyric acid and glycine, 17

FELTZ, P. see DESARMENIEN, P., 355

FERRI, S., SCOTO, G.M. & SPADARO, C. Increase of opoid activity in the rat pituitary following the administration of sulpiride, 155P

FEUERSTEIN, NILI, FOEGH, MARIE, RAMWELL, PETER W. Leukotrienes C<sub>4</sub> and D<sub>4</sub> induce prostaglandin and thromboxane release from rat peritoneal macrophages, 389

FINCH, L., HERSOM, A.S. & LEACH, G.D.H. Comparative studies on the cardiovascular and behaviour actions of guanabenz and clonidine, 580P

FINOLLO, R. see BRAMBILLA, G., 186P

FLAVAHAN, N.A. & McGrath, J.C. An analysis of  $\alpha_1$ - and  $\alpha_2$ -adrenoceptor mediated pressor effects of adrenaline, 519P

Demonstration of simultaneous α<sub>1</sub>-,α<sub>2</sub>-,β<sub>1</sub>- and β<sub>2</sub>- adrenoceptor mediated effects of phenylephrine in the cardiovascular system of the pithed rat, 585P

FLOWER, R.J. see BLACKWELL, G.J., 136P

FOLCO, G.G. see BERTI, F., 140P

FORD-HUTCHINSON, A.W. see BRAY, M.A., 483

Forster, Christine & Whalley, E.T. Comparison of various tryptamine analogues on the human basilar artery and rat aorta in vitro, 517P

 Spiperone contracts the human basilar arterial strip in vitro: possible interaction with 5-hydroxytryptamine receptors? 581P

FOSTER, G. see BIRCH, N.J., 506P

FOSTER, R.W. & JONES, D.W. An *in vitro* comparison of haloalkylamine activity upon rat anococcygeus and guinea-pig trachealis, 531P

FOX, K. see ARMSTRONG-JAMES, M., 507P

FOZARD, J.R. see BARTHOLEYNS, J., 182P

Fracasso, M.E. see Benoni, G., 185P

Fraeyman, N.H. see De Schaepdryver, A.F., 567P

Francis, Hilary P. see Chadwick, M. Ann, 536P

Franco, L. see Conforti, A., 137P

Franconi, Flavia see Bandinelli, R., 115P

FREEDMAN, S.B. & WOODRUFF, G.N. Effect of drugs on [3H]-sulpiride binding in rat striatal synaptic membranes, 129P

FRICKE, UWE, KLAUS, WOLFGANG., & ROGATTI, MICHAEL., Active site-directed alkylation of Na<sup>+</sup> -K<sup>+</sup>-ATPase by digitalis sulphonate derevatives of different lipophilicity, 25

FRIER, M. see D'AMICO, K.M., 180P

FRIGENI, V. see BRUNO, F., 166P

FROEGH, MARIE see FEUERSTEIN, NILI, 389

FUMIGALLI, G. see BRIGONZI, A., 110P

 $\mathbf{G}$ 

GAIARDI, M. see BABBINI, M., 167P

GAION, R.M. see CAPARROTTA, L., 106P

GALVAN, M., GRAFE, P. & TEN BRUGGENCATE, G. Presynaptic actions of GABA on rat isolated sympathetic ganglia demonstrated in the presence of 4-aminopyridine 159P

GALZIN, ANNE-MARIE see DUBOCOVICH, MARGARITA L., 497P

GANDALFI, O. see DALL'OLIO, R., 169

GARCÍA, ANTONIO G. see AUNIS, DOMINIQUE, 31

GARGUILO, G., NISTICÒ, G., ROTIROTI, D., SILVESTRI, R. & STEPHENSON, J.D. Stereotyped behaviour in fowls elicited by apomorphine given into the optic ventricle and into the nucleus lateralis, 124P

GASZNER, P. see BRADSHAW, C.M., 131P

GEISOW, H.P. see COLEMAN, R.A., 524P

GEROSA, F., PEZZINI, A., PEZZIGHELLA, S., RIVIERA, A.P. & TRIDENTE, G. Role of agonists and antagonists of histamine lymphocyte receptors on functional expression of the immune system, 187P

GIARETTI, W. see BRAMBILLA, G., 186P

GIBBONS, W.R., MUGELLI, A. & VASSALLE, M. A pharmacological study of the oscillatory current in cardiac Purkinie fibres, 117P

GIBSON, A., GINSBURG, M. & PATEL, S. The effect of

Mg<sup>2+</sup>-free Krebs solution on agonist responses in the bisected vas deferens of the rat, 564P

GILBERT, J.C. see EDGAR, ELAINE G., 549P

GILLAN, MAUREEN G.C., KOSTERLITZ, HANS W. & MAGNAN, J. Unexpected antagonism in rat vas deferens by benzomorphans which are agonists in other pharmacological tests, 13

GILLESPIE, J.S. see BOWMAN, ANNE, 365

GILLESPIE, J.S., HUNTER, J.C. & MCKNIGHT, A.T. The effect of ethanol on motor and inhibitory responses of the anococcygeus and bovine retractor penis muscle, 528P

GILLI, G. see BERTOLASI, V., 175P

GINSBURG, M. see GIBSON, A., 564P

GIOTTI, A. see BANDIELLI, R., 115P

GIOTTI, A. see BARTOLINI, A., 156P

GIOVANNINI, MARIA GRAZIA see DELLA CORTE, LAURA, 184P

GIRALDI, T. see CUMAN, R., 107P

GOADBY, P. see ANDERSON, A.A., 533P

- see Chadwick, M. Ann, 536P

GODFRAIND, T. see DE POVER, A., 513P

- see DIEU, D., 583P

— see Donkier, J., 578P

GODFRAIND, T. & GODFRAIND-DE BECKER, ANNE. Creatinol O-phosphate is a potential intracellular buffer, 578P

GODFRAIND, T. & MOREL, NICOLE. Identification of the specific binding of flunarizine to rat aorta, 517P

GODFRAIND-DE BECKER, ANNE see GODFRAIND, T. 578P GODFRIED, T. see DUONG, A.T., 510P

GOODFRIEND, T.L. & SIMPSON, R.U. Angiotensin receptors in bovine umbilical artery and their inhibition by nonsteroidal anti-inflammatory drugs, 247

GOMMEREN, W. see CLOW, A., 569P

GORDON, D. & NOURI, A.M.E. (Introduced by LEWIS, G.P.) Anti-proliferative effects of cyclosporin-A and glucocorticosteriods on mitogen-stimulated human blood mono-nuclear cells, 588P

GRAFE, P. see GALVAN, M., 159P

GREAVES, M.W. see BURNSTOCK, G., 516P

GRIFFETT, ELIZABETH M., KINNON, SUSAN M., KUMAR, A., LECKER, DOROTHY, SMITH, GILLIAN M. & TOMICH, E.G. Effects of 6-[p-(4-phenylacetylpiperazin-1-yl)phenyl]-4,5-dihydro-3(2H)pyridazinone and aspirin on platelet aggregation and adhesiveness, 697

GROPPETTI, A. see DI GIULIO, A.M., 146P

GROWCOTT, J.W., MORLEY, J.S., PETTER, M.N., PINNOCK, R.D., TURNBULL, M.J. & WOODRUFF, G.N. Differences between central and peripheral actions of substance P and substance P-(1-9)-nonapeptide, 504P

GUNDERSEN, CAMERON B. & JENDEN, DONALD J. Studies of the effects of agents which alter calcium metabolism on acetylcholine turnover in the rat diaphragm preparation, 461

GUPTA, Y.K. see BHARGAVAM K.P., 471

Н

HAMER, J. see JOHNSTON, A., 135P

HAMILTON, C.A. & REID, J.L. The effect of 6hydroxydopamine on rabbit peripheral alpha adrenoceptors in vivo and in vitro, 119P Hamilton, T.C. Involvement of the adrenal glands in the hypotensive response to bromocriptine in spontaneously hypertensive rats, 419

HALSEY, M.J. & WARDLEY-SMITH, BRIDGET (introduced by JOSEPH, H.H.) The high pressure neurological syndrome: do anti-convulsants prevent it? 502P

HANSRANI, P. see D'AMICO, K.M., 180P

HARDY, J.G. see D'AMICO, K.M., 180P

HARE, J.R. see BRISTOW, D.R., 547P

HARMAR, A.J. see DAWBARN, D., 493P

HARRIS, J.B., SUTHERLAND, S. & ZAR, M.A. Actions of the crude venom of the Sydney funnel-web spider, Atrax robustus on autonomic neuromuscular transmission, 335

HARROWING, P.D. & WILLIAMS, K.I. The prostaglandin synthesis inhibitor in placental homogenates is located in trapped blood elements, 183P

HATHAWAY, N.R. see JOHNSTON, A., 135P

HATTON, R. see ADIGUN, S.A., 514P

HAWKSWORTH, G.M. & MORRISON, M.H. The effect of streptozotocin-induced diabetes on glucuronyl transferase activity in the rat, 539P

HAY, D.W.P. & WADSWORTH, R.M. A comparison of the effects of some calcium antagonists on drug-induced rhythmic contractions of the rat vas deferens, 563P

— The contractile effects of 5-hydroxytryptamine on the rat isolated vas deferens, 170P

 Potassium contractures in isolated rat vas deferens: role of noradrenaline release and of extra-cellular calcium, 143P

HEADLEY, P.M., see DESARMENIEN, P., 355

HEARN, J.R. see Bristow, D.R., 547P

HENDERSON, B. see BITTENSKY, LUCILLE, 522P

HENDERSON, G. & SIM, J.A. The effect of extracellular sodium ion concentration on the action of opiates to inhibit [<sup>3</sup>H]-noradrenaline release from the mouse vas deferens, 529P

HENRIKSSON, R. see CARLSÖÖ, B., 271

HENRY, J.A. see JOHNSTON, A. 135P

HENRY, J.L. Naloxone excitation of spinal nociceptive units fails to occur in hypophysectomized cats, 157P

HERSOM, A.S. see FINCH, L., 580P

HICKS, P.E. Differential α-adrenoceptor antagonism by BE 2254 (HEAT) and prazosin at pre- and post-synaptic receptors in the pithed rat, 586P

— see Borkowski, K.R., 172P

HICKS, R. & SAHOUN, H.A. Immunosuppressive effects of vinyl chloride monomer on delayed hypersensitivity in the guinea-pig, 553P

HIGGINSON, IRENE J., MARSDEN, C.A., STANDEN, PENNY J. & WHITTAL, M.G. Exploratory, social and (+)-amphetamine induced behaviour in spontaneously hypertensive rats, 579P

HIGGS, G.A. see BITTENSKY, LUCILLE, 522P

HILL, R.C., MARBACH, P. & SCHERRER, D. Method for determining the CNS penetration of enkephalin analogues in the rat, 571P

HITCHCOCK, MARGARET & KOKOLIS, NICHOLAS A. Arachidonic acid metabolism and modulation of *in vitro* anaphylaxis by 5,8,11,14-eicosatetraynoic acid and 9a,12a-octadecadiynoic acid, 689

Ho, A.K., see ARENDT, J., 257

HOBBIGER, F. see CLARK, AMANDA L., 545P

HODSON, STEPHANIE G. see CRAGGS, M.D., 176P

HORN, N., MARCOU, MARGARET, MUNDAY, K.A. & WOOD-RUFF, G.N. Effects of dopamine receptor agonists in the guinea-pig renal vasculature and their antagonism by sulpiride, 507P

HORNBY, E.J. see COLEMAN, R.A., 524P

HOURANI, S.M.O. see CUSACK, N.J., 443

Howe, S.J., Salt, T.E., Tulloch, I. & Walter, D.S. (introduced by Metcalfe, G.) Effect of anti-grand mal drugs on kindled epilepsy in the rat, 501P

HUDLICKA, O., KOMAREK, J. & WRIGHT, A.J.A. The effect of a xanthine derivative 1-(5'oxohexyl)-3-methyl-7propylxanthine (HWA 285) on heart performance and regional blood flow in dogs and rabbits, 723

HUMPHRAY, JANET M. see DALY, M.J., 49

- see DALY, M.J., 55

HUMPHREY, P.P.A. see COLEMAN, R.A., 524P

HUNTER, J.C. see GILLESPIE, J.S., 528P

I

Idahl, L-Å. see Carlsöö, B., 271 Ingham, S. see Bold, J.M., 509P Ismail, S. see Adrian, R.W., 573P

ISMAIL, S., JAHN, U. & WEETMAN, D.F. Sgd 101/75 (4(2-imidazoline-amino)-2-methyl-indazol-chlorhydrate): a drug that can act as an agonist, partial agonist or an-

tagonist on alpha-adrenoceptors of isolated tissues, 535P

ITO, S., NAKAZATO, Y. & OHGA, A., Further evidence for the involvement of Na<sup>+</sup>channels in the release of adrenal catecholamine: the effect of scorpion venom and grayanotoxin I, 61

IULIANO, E. see BRUNO, F., 166P

J

JAHN, U. see ADRIAN, R.W., 573P

- see Ismail, S., 535P

JAMES-KRACKE, MARILYN & ROUFOGALIS, BASIL D. Alteration of smooth muscle contractility after muscarinic agonist-induced K<sup>+</sup> loss, 609

JENDEN, DONALD J. see GUNDERSEN, CAMERON B., 461 JENNER, P. see CLOW, A., 569P

JENNER, P., LEIGH, P.N., MARSDEN, C.D. & REAVILL, C. Cortical involvement in forepaw myoclonus induced by intrastriatal administration of picrotoxin to rats, 503P

 Involvement of the periaqueductal grey in dopaminemediated circling behaviour, 429P

JENNER, P., MARSDEN, C.D., REAVILL, C. & THEODOROU, A. Reduction of specific [3H]-sulpiride binding sites in rat striatum following decortication of striatal kainic acid lesions, 130P

JENNER, P., MARSDEN, C.D. & TAYLOR, R.J. Behavioural changes induced by the unilateral instriatal administration of glutamate analogues in the rat, 570P

JIRITANO, L. see ALGERI, S., 156P

JOHNSTON, A., BURGESS, C.D., HENRY, J.A., HATHAWAY, N.R. & HAMER, J. Mexiletine elimination: influence of urinary pH and volume 135P

JONES, D.W. see FOSTER, R.W., 531P JORIZZO, J. see BURNSTOCK, G., 516P K

KAJDA, P.K. see BIRCH, N.J., 506P

— see BIRCH, N.J., 576P

KAMAL, LINDA A. see ARBILLA, SONIA, 499P

KANE, KATHLEEN A., McDonald, FIONA M. & PARRATT, J.R. What pharmacological properties are necessary for the prevention of early post-infarction ventricular dysrythmias? 512P

KARANIAN, J.W., MORAN, F.M., RAMEY, E.M. & RAM-WELL, P.W., Gender differences in prostaglandin receptors of rat aorta, 10

KARASHIMA, TSUYOSHI. Effects of vasopressin on smooth muscle cells of guinea-pig mesenteric vessels, 673

KAZDA, S. & TOWART, R. Differences in the effects of the calcium antagonists nimodipine (BAY e 9736) and bencyclan on cerebral and peripheral vascular smooth muscle, 582P

KEELING, M. see BENNETT, G.W., 151P

KEENAN, A.K. see CALLANAN, K., 191P

KEMP, J.D. see Cox, B., 491P

KENNEDY, I. see COLEMAN, R.A., 524P

KINDNESS, G., LONG, W.E. & WILLIAMSON, F.B. The anticoagulant activity of dermatan sulphates: evidence against the involvement of antithrombin III, 81

KINNON, SUSAN M. see GRIFFETT, ELIZABETH M., 697

KIRK, K.L. see Costa, J.L., 449

KLAUS, WOLFGANG see FRICKE, UWE, 25

KOKOLIS, NICHOLAS A. see HITCHCOCK, MARGARET, 689

KOMAREK, J. see HUDLICKA, O., 723

KOSTERLITZ, HANS, W. see GILLAN, MAUREEN G.C., 13

KRUK, Z.L. see ARMSTRONG-JAMES, M., 507P

KUMAR, A. see GRIFFETT, ELIZABETH M., 697

L

LAMPA, E. see Brezenoff, H.E., 170P

LAMBERT, JEREMY J. see DURANT, NICHOLAS, N., 41

LANGER, S.Z. see ARBILLA, SONIA, 154P

- see Arbilla, Sonia, 499P

- see Briley, M., 152P

- see Briley, M.S., 179P

— see Dubocovich, Margarita L., 497P

LANGER, S.Z., MASSINGHAM, R., SHEPPERSON, N.B. An explanation of the resistance of the noradrenaline pressor response to prazosin blockade in vivo, 121P

— Differential sensitivity to prazosin blockade of endogenously released and exogenously administered noradrenaline: possible relationship to the synaptic location of  $\alpha_1$ -and the extrasynaptic location of  $\alpha_2$ -adrenoceptors in dog vascular smooth muscle, 123P

LASSIANI, L. see CUMAN, R., 107P

LAUD, C. see Arendt, J., 257

LAVERGNE, L. see BACQ, Z.M., 521P

LEACH, G.D.H. see FADLOUN, Z., 117P

- see Fadloun, Z., 189P

— see FINCH, L., 580P

LECKER, DOROTHY see GRIFFETT, ELIZABETH M., 697

LEDINGHAM, I. MCA see COKER, SUSAN J., 593

LEE, T.F. see Cox, B., 477

LEFEBVRE, R.A. & WILLEMS, J.L. Dopamine inhibition of the transmurally-stimulated gastric fundus of the rat, 537P Lefèvre-Borg, Françoise, see Armstrong, J.M. 107P Leigh, P.N. see Jenner, P., 492P

— see Jenner, P., 503P

LEMEIGNAN, M., MOLGO, J. & TAZIEFF-DEPIERRE, F. Effects of sea *Anemonia sulcata* toxin II on normal and chronically denervated mammalian neuromuscular junction, 546P

LEONE, R. see BENONI, G., 185P

LESLIE, G.C. & PART, N.J. The action of dantrolene sodium on rat fast and slow muscle *in vivo*, 665

LEVY, G.P. see COLEMAN, R.A., 524P

LEWANDOWSKA, E.A.M. (introduced by BRADLEY, P.B.) A method for screening the effects of drugs on manual co-ordination of the marmoset, 494P

LEYSEN, J. see CLOW, A., 569P

LEYSON, J.E. & NIEMEGEERS, C.J.E. Receptor occupation and in vivo pharmacological effects in rats, 487P

LITTLE, R.A., REDFERN, W.S. & STONER, H.B. (introduced by CARPENTER, J.) Effects of centrally-administered 6-hydroxydopamine on hypertension during muscle ischaemia in the unanaesthetized rat, 508P

LLOYD, K.G. see Bartholini, G., 128P LOCATELLI, V. see Apud, J.A., 150P LONG, W.F. see KINDNESS, G., 81 LONGIAVE, D. see CESERANI, R., 178P

LUMLEY, P. see COLEMAN, R.A., 524P

#### м

McCabe, P.J. see Coleman, R.A., 524P MacDermot, J. see Blair, I.A., 435

MACDONALD, A. & McGrath, J.C. Effects of nerve stimulation and agonist drugs on the vas deferens of immature rats. 527P

McDonald, Fiona M. see Kane, Kathleen A., 512P

MACDONALD, I.A. see BELL, G.D., 104P

McDougall, P., Markham, A. & Sweetman, A.J. The effect of the nonsteroidal anti-inflammatory agent, diflunisal, on energy metabolism in mitochondria isolated from rat liver, 552P

McGrath, J.C. Effects of yohimbine analogues on neuronal and smooth muscle  $\alpha$ -adrenoceptors in rat vas deferens, 526P

- see Flavahan, N.A., 519P

- see Flavahan, N.A., 585P

- see Macdonald, A., 527P

McKnight, A.T. see Gillespie, J.S., 528P

McQueen, D.S. & Rabeiro, J.A. Comparison of the depressant effects of leucine and methionine-enkephalin on spontaneous chemoreceptor activity in cats, 544P

MADJAR, H. see DOCHERTY, J.R., 120P

Magnan, Jacques, see Gillan, Maureen G.C. 13

Main, I.H.N. see Baird, A.W., 562P

MAJID, ELLISHA, & SENIOR, JUDITH. Modification of the uterotrophic respones to oestradiol by mepyramine and inhibitors of prostaglandin synthesis, 550P

MALMBERG, P. see BARTOLINI, A., 156P

MANARA, L. see COCCIA, P., 181P

MANARA, L. MONFERINI, EUGENIA & STRADA, D. Rat small intestine contains opiate receptor binding and a potent interfering factor, 147P

Mannaioni, P.F. see Blandina, P., 109P

MANSINI, EMANUELA see BLANDINI, P, 109P

MANTEGAZZA, P. see CURRUBA, M.O., 161P

— see Di Giulio, A.M., 146P

— see Di Giulio, A.M., 167P Marabini, L. see Chiesara, E., 181P

MARBACH, P. see HILL, R.C., 571P

MARCOU, MARGARET, see HORN, N., 507P

MARKHAM, A. see McDougall, P., 552P

MARMO, E. see BREZENOFF, H.E., 170P

MAROLI, A.N. see COLPEART, F.C., 489P

MARSDEN, C.A. see ALDRIDGE, S.J., 126P

— see Higginson, Irene J., 579P

MARSDEN, C.D. see CLOW, A., 569P

- see JENNER, P., 130P

- see Jenner, P., 492P

-- see JENNER, P., 503P

- see JENNER, P., 570P

MARSHALL, I. see BHALLA, P., 171P

MARSHALL, NICHOLAS J. see AXFORD, JOHN S., 69

MARSHALL, R.J., & MUIR, A.W. The antiarrhythmic haemodynamic effects of a new antianginal agent, berpedil, in the early stages of canine acute myocardial infarction, 114P

MARSTON, A. see ARENDT, J., 257

MARTIN, D. see Cox, B., 477

Martelli, A. see Brambilla, G., 186P

MARTIN, A.R. & MITCHELL, MARY R. (Introduced by GINS-BORG, B.L.) An electrophysiological study of the effects of ionophore A23187 in an insect salivary gland, 556P

MARTIN, L.E. see BRISTOW, D.R., 547P

MARTIN, M.J. see BLACKWOOD, D.H.R., 500P

MARTIN, W. see BOWMAN, ANNE, 365

MARTINEZ-CAMPOS, A., see COCCHI, D., 151

MARTINI, F. see BANDINELLI, R., 115P

MARTINI, P. see DELLA CORTE, LAURA, 184P

MARTINOTTI, E. see BERNARDINI, C., 177P

MARTORANA, M.G. & RODGER, I.W. Effects of Ca<sup>2+</sup> withdrawal and verapamil on excitation-contraction coupling in sensitized guinea-pig airway smooth muscle, 175P

MARY, P.L., & RAO, J. PRAKASA, Type of adrenoceptors involved in induction by adrenaline of hepatic alkaline phosphatase in mice in vivo, 8

MASSI, M. see DE CARO, G., 162P

MASSINGHAM, R. see LANGER, S.Z. 121P

— see Langer, S.Z., 123P

MEGAZZINI, IRENE see DELLA CORTE, LAURA, 184P

MEMO, M., SPANO, P.F. & TRABUCCHI, M. Characterization and localization of dopamine-D<sub>2</sub> central receptors, 124P

MICOSSI, L.G. see DE CARO, G., 162P

MIDDLETON, B. see BELL, G.D., 104P

MIETTO, L. see BIGON, E., 108P

MILANINO, R. see CONFORTI, A., 137P

MILLAR, J. see Armstrong-James, M., 507P

MILTON, A.S. & TODD, DOROTHY A. The effect of cycloheximide on endogenous pyrogen fever, 543P

MISTEREK, K. see ALGERI, S., 156P

MITCHELL, MARY R. see MARTIN, A.R., 556p

MITOLO-CHIEPPA, D. see CONTE-CAMARINO, D. 112P

MIZZOTTI, B. see CESERANI, R., 178P

MOLGO, J. see LEMEIGNAN, M., 546P

MONCADA, S., MULLANE, K.M. & VANE, J.R. The release of vasodilators by renin may contribute to the antihypertensive activity of captopril, 511P

MONETI, G. see BANDINELLI, R., 115P

MONFERINI, EUGENIA see MANARA, L., 147P

MONTANARO, N. see DALL'OLIO, R. 169P

MONTASTRUC, JEAN-LOUIS & MONTASTRUC, PAUL. Effect of intracisternal 5,7-dihydroxytryptamine on the acute antihypertensive action of propranolol in sino-aortic denervated anaesthetized dog, 411

MONTASTRUC, PAUL see MONTASTRUC, JEAN-LOUIS, 411

MOORE, R.A. see BORKOWSKI, K.R., 172P

MORAN, F.M. see KARANIAN, J.W. 10

MOREL, NICOLE see GODFRAIND, T., 517P

MORGAN, K. see BILLINGHAM, M.E.J., 551P

MORLEY, J.S. see GROWCOTT, J.W., 504P

MORONI, F. see CASAMENTI, F., 149P

MORRISON, M.H. see HAWKSWORTH, G.M., 539P

MORSELLI, P.L. see BIANCHETTI, G., 135P

MOSER, P.C. & WYLLIE, M.G. Assessment of neurotransmitter uptake in vivo, 488P

MUGELLI, A. see GIBBONS, W.R., 177P

MUIR, A.W. see MARSHALL, R.J., 114P

MULLANE, K.M. see MONCADA, S., 511P

MÜLLER, E.E. see APUD, J.A., 150P

— see Coccнi, D., 151Р

— *see* Curruba, M.O., 161Р

MUNDAY, K.A. see HORN, N., 507P

MURPHY, D.L. see Costa, J.L., 449

## N

NAHORSKI, S.R. see ABBOTT, R., 164P

- see Dickinson, K.E.J., 165P

NAKAZATO, Y. see Ito, S., 61

Naylor, R.J. see Costall, B., 558P

- see Costall, B., 568P

NEUMEYER, J.L. see COSTALL, B., 568P

NICHOLSON, C. DAVID see BROADLEY, KENNETH J., 635

NIEMEGEERS, C.J.E. see LEYSON, J.E., 487P

NILAM, F. & SMITH, I.R. (Introduced by BRIMBLECOMBE, R.W.) Nα-6-Methylhistamine was not detected in brain by a sensitive, specific radioenzymatic assay, 505P

NISHIMURA, S., SORIMACHI, M. & YAMAGAMI, K. Exocytotic secretion of catecholamines from the cat adrenal medulla by sodium deprivation: involvement of calcium influx mechanism, 305

NISI, C. see CUMAN, R., 107P

NISTICO, G. see GARGIULO, G., 124P

NISTRI, A. see CONSTANTI, A, 113P

NOHRIA, V. see ARENDT, J., 257

NORRIS, D.B., RISING, T.J., WARRANDER, S.E., & WOOD, T.P. (Introduced by ROBINSON, J.D.) [3H]-cimetidine binding in guinea-pig gastric mucosa, 548P

NOTARIANNI, LIDIA J. see BENNETT, P.N., 540P

Nouri, A.M.E. see Gordon, D., 588P

NYEMITEI-ADDO, I. & PERTWEE, R.G. Effects of intrahypothalamic injections of adenosine monophosphate and dopamine on thermoregulation in restrained mice, 566P

#### 0

OCHILLO, R.F., TSAI, C.S. & TSAI, M.H. Mechanism of action of muscarine on the longitudinal muscle of guinea-pig isolated ileum, 225

OHGA, A., see ITO, S., 61

OHIZUMI. Y. & SHIBATA, S. Possible mechanism of the dual action of the new polypeptide (Anthopleurin-B) from sea anemone in the isolated ileum and taenia caeci of the guinea-pig, 239

OMINI, G., see BERTI, F., 140P

ORME, M.L'E. see BACK, D.J., 538P

— see BACK, D.J., 541P

## P

PALA, M. see Brambilla, G. 186P

PALOMO, T. see BLACKWOOD, D.H.R., 500P

- *see* Сніυ, А., 495Р

PANERAI, A. see DI GIULIO, A.M., 167P

PANT, K.K. see BHARGAVA, K.P., 192P

PARENTE, L. see BLACKWELL, G.J. 136P

PARKES, J. see DASCOMBE, M.J., 565P

PARODI, S. see BRAMBILLA, G., 145P

– see Brambilla, G., 186P

PARRATT, J.R. see COKER, SUSAN J., 593

- see Kane, Kathleen A., 512P

PARSONS, M.E. see BUNCE, K.T., 561P

PART, N.J. see LESLIE, G.C., 665

PATEL, S. see GIBSON, A., 564P

PATON, W.D.M. & WING, D.R. Effects of halothane on the incorporation of [14C]-serine into phospholipid in the guinea-pig ileum, 397

PATRIGNANI, P. see BIANCHI PORRO, G., 141P

PATRONO, C. see BIANCHI PORRO, G., 141P

PEARCE, F.L. & WHITE, J.R., Effect of lanthanide ions on histamine secretion from rat peritoneal mast cells, 341

PEDATA, F. see ANTONELLI, T., 148P

PEPEU, G. see ANTONELLI, T., 148P

see Casamenti, F., 149P

PERALTA, E. see DI GIULIO, A.M., 167P

PERBAL, BERNARD. Inactivation of Herpes simplex virus by a pregnene derivative (TX 3047), 597

Pertwee, R.G. see Nyemitei-Addo, I., 566P

PERUCCA, E., PICKLES, H., QUY, R. & RICHENS, A. A standardized method for assessing the effect of  $\beta$ adrenoceptor blocking drugs upon isoprenaline-induced physiological tremor and tachycardia: test for cardioselectivity, 133P

PETROGALLI, R. see Bruno, F., 166P

PETTER, M.N. see GROWCOTT, J.W., 504P

PETTINGER, S.J. see BILSKI, ALISON J., 587P

PETTY, M.A. & REID, J.L. The cardiovascular effects of intracisternal substance P in the normotensive rat, 577P

PETTY, MARGARET A. & REID, J.L. Captopril and the maintenance of blood pressure after sinoaortic denervation in the rabbit, 645

PEZZINI, A. see GEROSA, F., 187P

PICKENS, JOAN T. Sedative activity of cannabis in relation to its  $\Delta'$ -trans-tetrahydroncannabinol and cannabidiol content, 649

- see Fairbairn, J.W., 401

PICKLES, H. see PERRUCA, E., 133P
PIMOULE, CARMEN see BRILEY, M.S., 179P
PINNOCK, R.D. see GROWCOTT, J.W., 504P
PINO, A. see BRAMBILLA, G., 145P
PIPILI, EVA & POYSER, N.L. Effects of nerve stimulation

PIPILI, EVA & POYSER, N.L. Effects of nerve stimulation and of administration of noradrenaline or potassium chloride upon the release of prostaglandins  $I_2$ ,  $E_2$  and  $F_{2\alpha}$  from the perfused mesenteric arterial bed of the rabbit, 89

Pirisino, R. see Buffoni, F., 173P Pizzighella, S. see Gerosa, F., 187P

PLETCHER, ALFRED. Liberation of catecholamines from blood platelets, 349

PLUMMER, S.M. see BALFOUR, D.J.K., 572P

POAT, JUDITH A. & TEMPLETON, D. Parasympathectomy increases β-adrenoceptor density in the rat parotid gland, 534P

Pollock, D. see Brown, Janette M., 542P
Popplewell, D.A. see Burton, M.A., 621
Pornin, Claudie see Arbilla, Sonia, 154P
Poyser, N.L. see Pipili, Eva, 89
Pozzi, O. see Ceserani, R., 178P
Prakash, N.J. see Bartholeyns, J., 182P
Price, C.A. see Bunce, K.T., 561P
Pugliese, F. see Bianchi Porro, G., 141P
Puliti, Roberta see Della Corte, Laura, 184P
Pycock, C.J. see Barlow, 277
— see Dawbarn, D., 493P

## Q

OUY, R. see PERRUCA, E., 135P

## R

RABINDER, KAUR see BRYAN, A.J., 557P RACAGNI, G. see APUD, J.A., 150P - see Bruno, F., 166P RAISMAN, RITA see Arbilla, Sonia, 154P — see Briley, M., 152P RAITERI, M. see ANNUNZIATO, L., 160P - see CERRITO, F. 127P RAMEY, E.R. see KARANIAN, J.W. 10 RAMWELL, P.W. see KARANIAN, J.W. 10 RAO, J. PRAKASA see MARY, P.L., 8 REAVILL, C. see JENNER, P., 130P - see JENNER, P., 492P — see JENNER, P., 503P REDFERN, W.S. see LITTLE, R.A., 508P REID, J.L. see HAMILTON, C.A., 119P — see РЕТГҮ, М.А., 577P - see PETTY, MARGARET, A., 645 RICCIARDI, S. see CURRUBA, M.O., 161P RICHENS, A. see PERRUCA, E. 133P RISING, T.J. see NORRIS, D.B., 548P RIVIERA, A.P. see GEROSA, F., 187P ROBBIANO, L. see BRAMBILLA, G., 145P ROBINSON, G. see BRYAN, A.J., 557P RODGER, I.W. see MARTORANA, M.G., 175P ROGATTI, MICHAEL see FRICKE, UWE, 25 ROLAND, J. see BIRMINGHAM, A.T., 134P

RABEIRO, J.A. see McQueen, D.S., 544P

ROSSI, F. see BREZENOFF, H.E., 170P ROSSONI, G., see BERTI, F., 140P ROTIROTI, D. see GARGIULO, G., 124P ROUFOGALIS, BASIL D. see JAMES-KRACKE, MARILYN, 609 ROWE, P.H. see BACK, D.J., 538P RUSSELL, D.C. Haemodynamic effects of sulphinpyrazone in experimantal ischemia, 5 RYAN, M.P. see DEVANE, J., 285

#### S

SACERDOTI, M. see BERTOLASI, V., 175P SAHOUN, H.A. see COSTALL, B., 558 SALMON, J.A. see BITTENSKY, LUCILLE, 522P SALT, T.E. see HOWE, S.J., 501P SALVATI, PATRICIA & WHITTLE, B.J.R. Vascular actions of prostaglandins on the isolated perfused stomach of the rabbit, 139P SANTANGELO, FRANCESCA see DESARMENIEN, P., 355 SAVA, G. see CUMAN, R., 107P SCARAGLI, G.P. see DELLA CORTE, LAURA, 184P SCARPIGNATO, C. see BERTACCINI, G., 103P - see Bertaccini, G., 221 SCATTON, B. see BARTHOLINI, G. 128P SCHERRER, D. see HILL, R.C., 571P SCOTO, G.M. see FERRI, S., 155P SCUVÉE-MOREAU, J. see DRESSE, A., 498P SECHTER, D. see BRILEY, M., 152P SEMERARO, C. see CARPI, C., 188P SENIOR, JUDITH see MAJID, ELLISHA, 550P SHAW, J.S. see BOWERY, N.G., 142P SHAYOUN, H.A. see HICKS, R., 553P SHEARDOWN, M. see ALDEEN, SUSAN I., 211 SHEN, LI see AXFORD, JOHN S., 69 SHEPPERSON, N.B. see LANGER, S.Z., 121P — see Langer, S.Z., 123P SHER, E. see BRIGONZI, A., 110P SHIBATA, S. see OHIZUMI, Y., 239 SICUTERI, F. see DEL BIANCO, P.L., 174P SILVA, M. ROCHA E. JR., see FELDBERG, W., 17 SILVESTRI, R. see GARGIULO, G., 124P SIM, J.A. see HENDERSON, G., 529P SIMPSON, R.U. see GOODFRIEND, T.L., 247 SINGH, P. see DE SCHAEPDRYVER, A.F., 567P SINISCALCHI, A. see BEANI, L., 158 SIROCHMAN, VICKI L. see CARNEY, J.M., 245 SKETT, PAUL. The effect of pituitary hormones on hepatic drug metabolism, 553P SMALL, R.C. see CLARK, L.A., 530P --- see Clark, L.A., 554P SMITH, GILLIAN M. see GRIFFETT, ELIZABETH M., 697 SMITH, I.R. see NILAM, F., 505P SMITH, J.A. see ARENDT, J., 257 SMITH, M.J.H. see BRAY, M.A., 483 SMITH, M.N. see BILLINGHAM, M.E.J., 551P SOLDANI, G. see BERNARDINI, C., 177P SORIMACHI, M. see NISHIMURA, S., 305 SPADARO, C. see FERRI, S., 155P SPANO, P.F. see MEMO, M., 124P SPEDDING, M. Marked differences in the effects of calcium ion antagonists on calcium chloride-induced contrac-

tions in potassium ion-depolarized smooth muscle, 144P

SPRAGGS, C. see BOLD, J.M., 509P SPRAKE, SALLY see AXFORD, JOHN S., 69 STABLES, R. see DALY, M.J., 49 — see Daly, M.J., 55 STANDEN, PENNY J. see HIGGINSON, IRENE J., 579P STANWORTH, D.R. see BATCHELOR, K.W., 95 STARK, H. see Costa, J.L., 449 STARKE, K. see DOCHERTY, J.R., 120P STENDARDI, ISABELLA see BANDINELLI, R., 115P STEPHENSON, J.D. see CRAGGS, M.D., 175P - see Gargiulo, G., 124P STONER, H.B. see LITTLE, R.A., 508P STRADA, D. see MANARA, L., 147P STRETTLE, R.J. see BATES, R.F.L., 559 - see BATES, R.F.L., 575P SUPRADIST, SUMARN see BENNETT, P.N., 540P SUTHERLAND, S. see HARRIS, J.B., 335 SWEETMAN, A.J. see McDougall, P., 552P SYKES, C.C. see BUNCE, K.T., 561P Symons, A.M. see Arendt, J., 257 SZABADI, E. see BRADSHAW, C.M., 131P

## T

TANGRI, K.K. see BHARGAVA, K.P., 192P TANINGHER, M. see BRAMBILLA, G., 186P TARJAN, E.M. see BIGON, E., 108P TAYLOR, R.J. see JENNER, P., 570P TAZIEFF-DEPIERRE, F. see LEMEIGNAN, M., 546P TEMPLETON, D. see POAT, JUDITJ A., 534P TEMPLETON, WILMA W. (Introduced by WOODRUFF, G.N.) Noradrenaline increased prostaglandin  $E_2$  and  $F_{2\alpha}$ synthesis in rat cerebral cortex via a  $\beta$ -adrenoceptor, 525P TEN BRUGGENCATE, G. see GALVAN, M., 159P TESSARI, F. see CAPARROTTA, L., 106P THEODOROU, A. see CLOW, A., 569P see Jenner, P., 130P THOMAS, N.W. see BRYAN, A.J., 557P THOMPSON, D.G. & WINGATE, D.L. Oral hyoscine butylbromide does not alter the pattern of small intestinal motor activity, 685 TIMIRAS, P.S. & VACCARI, A. Thyroid dysfunction and striatal dopamine receptors, 125P TODA, N. Cardiotoxic and inotropic effects of ouabain on atria isolated from rabbits of different ages, 263 Non-adrenergic, non-cholinergic innervation in monkey and human cerebral arteries, 281 TODD, DOROTHY A. see MILTON, A.S., 543P TOFFANO, G. see BIGON, E., 108P TOMICH, E.G. see GRIFFETT, ELIZABETH M., 697 TONA LUTETE, N. see DE POVA, A., 513P TOWART, R. see KAZDA, S., 582P TRABUCCHI, M. see MEMO, M., 124P TRIDENTE, G. see GEROSA, F., 187P TSAI, C.S. see OCHILLO, R.F., 225 Tsai, M.H. see Ochillo, R.F., 225 TULLOCH, I. see HOWE, S.J., 501P TURNBULL, M.J. see BOWERY, N.G., 142P — see Clark, L.A., 530P -- see Clark, L.A., 554P — see Growcott, J.W., 504P

TURNBULL, M.J. & WATKINS, J.W. Rebound decrease in CNS excitability following a single dose of amphetamine, 573P

TURNBULL, M.J., WATKINS, J.W. & WHEELER, H. Demonstration of withdrawal hyperexcitability following administration of benzodiazepines to rats and mice, 495P

TURNER, N.C. see CURWAIN, B.P., 560P

#### v

VACCARI, A. see TIMIRAS, P.S., 125P
VANE, J.R. see BITTENSKY, LUCILLE, 522P
— see MONCADA, S., 511P
VANHOUTTE, P.M. see DE MEY, J., 510P
VASSALLE, M. see GIBBONS, W.R., 117P
VELO, G.P. see CONFORTI, A., 137P
VERT, P. see BLANCHETTI, G., 135P
VIGANO, T. see BERTI, F., 140P
VINIKKA, L. & YLIKORKALA, O. Effect of

VINIKKA, L. & YLIKORKALA, O. Effect of various doses of acetylsalicylic acid in combination with dipyridamole on the balance between prostacyclin and thromboxane in human serum, 299

#### W

WADSWORTH, R.M. see HAY, D.W.P., 143P - see HAY, D.W.P., 170P — see HAY, D.W.P., 563P WALLIS, C.J. see COLEMAN, R.A., 524P WALTER, D.S. see Howe, S.J., 501P WARDLEY-SMITH, BRIDGET see HALSEY, M.J., 502P WAREING, ROSEMARY see BIRCH, N.J., 576P WARRANDER, S.E. see NORRIS, D.B., 548P WARRINGTON, RUTH see BOWERY, N.G., 142P WARRINGTON, S.J. see BARBAT, J., 131P WATKINS, J.W. see TURNBULL, M.J., 495P - see Turnbull, M.J., 573P WEETMAN, D.F. see ISMAIL, S., 535P WHALLEY, E.T. see FORSTER, CHRISTINE, 517P — see Forster, Christine. 581P WHARRAD, HEATHER J. see BIRMINGHAM, A.T., 134P WHEELER, H. see TURNBULL, M.J., 495P WHITE, D.A. see BELL, G.D., 104P WHITE, J.R. see PEARCE, F.L., 341 WHITTALL, M.G. see HIGGINSON, IRENE J., 579P WHITTLE, B.J.R. see BROUGHTON-SMITH, N.K., 291 — see Salvati, Patricia, 139P WIBO, M. see DUONG, A.T., 510P WILLCOCKS, A.L. see DICKINSON, K.E.J., 165P WILLEMS, J.L. see LEFEBVRE, R.A., 537P WILLIAMS, E.J. see BIRMINGHAM, A.T., 134P WILLIAMS, K.I. see EL TAHIR, K.E.H., 138P - see Harrowing, P.D., 183P WILLIAMSON, F.B. see KINDNESS, G., 81 WILLIAMSON, NICOLA M. see EVANS, M.H., 515P WILSON, C.G. see BIRMINGHAM, A.T., 134P — see Bryan, A.J., 557P — see D'AMICO, К.М., 180Р WING, D.R. see PATON, W.D.M., 397 WINGATE, D.L. see THOMPSON, D.G., 685

Winsey, N.J.P. see Edgar, Elaine G., 549P
Winter, Elizabeth A. see Barlow, R.B., 657
Wondrak, Gloria see Della Corte, Laura, 184P
Wood, T.P. see Norris, D.B., 548P
Woodruff, G.N. see Freedman, S.B., 129P
— see Growcott, J.W., 504P
— see Horn, N., 507P
Worms, P. see Bartholini, G., 128P
Wright, A.J.A. see Hudlicka, O., 723
Wyllie, M.G. see Moser, P.C., 488P

Y

YAMAGAMI, K. see NISHIMURA, S., 305

YLIKORKALA, O. see VIINIKKA, L., 229
YOFFE, JOAN R. Effects of inflammatory agents on lysosomal fragility and their inhibition by anti-inflammatory drugs, 603
YOUDIM, M.B.H. see BEN-HARARI, R.R., 731

Z

Zanardi, P. see Cocchi, D., 151P Zar, M.A. see Harris, J.B., 335 Zarifian, E. see Briley, M., 152P Zeitlin, I.J. see Coker, Susan J., 593 Zilletti, Lucilla see Bandinelli, R., 115P

# SUBJECT INDEX

#### A

- **A23187**, effect on acetylcholine release and tissue content in rat diaphragm preparations, 461
- -, effects on cockroach salivary gland, 556P
- -- , effect on histamine releasing capacity of nonidet P40treated mast cells, 95
- **Abdomen,** mouse, acetic acid-induced constrictions, comparison of analgesic effects of subcutaneous and intracerebroventricular injection of calcitonin, 575P
- Ablation, of chemoreceptor trigger zone, effect on emetic responses to Metenkephalin, morphine and naloxone in dog, 471
- **Acebutolol,** placental transfer and pharmocokinetics in newborn, 135P
- N-acetyl acebutolol, placental transfer and phamacokinetics in newborn, 135P
- Acetyl-β-methylcholine, secretory response of rat parotid gland, effect of parasympathectomy, 534P
- **Acetylcholine,** bronchospasmogenic activity, in relation to thromboxane  $A_2$  formation, 140P
- -- , catecholamine secretory effects in bovine isolated chromaffin cells, 31
- , effect on canine arterial preparations with endothelium removed, which had previously been made to contract to noradrenaline, 510P
- -- , effect on guinea-pig central and peripheral airways smooth muscle in vitro, 533P
- , effect on membrane potential, potassium efflux, and contraction of longitudinal muscle contraction of guinea-pig intestine, 319
- , electrically-evoked release, naloxone sensitive inhibition, 158P
- , induction of catecholamine secretion from cat adrenal medulla, effect of perfusion with calcium deficient or calcium free medium, 305
- , induction of contractions, effect of atropine, binodaline and imipramine in guinea-pig ileum, 573P
- , induction of contractions, reduction by histamine, dimaprit, or atropine, 171P
- , induction of contractions in guinea-pig ileum, reduction by sea anemone (Tealia felina) toxin, 211
- , induction of contractions throughout pregnancy, effect of catecholamines, 530P
- , induction of contractures of chick biventer cervicis muscle preparation, effect of methohexitone, 111P
- , induction of dose-dependent contractile responses of goat isolated pulmonary veins, 233
- , induction of phasic contractions, lack of influence during the sustained increase or decrease in tension induced by catecholamines, 201
- , inotropic effects in guinea-pig atrium, effect of dipyridamole, 587P
- , interaction with muscarinic cholinoceptors in rat isolated mast cells, 109P
- , presynaptic release, indirect mechanism of action of muscarine in guinea-pig muscle, 225
- , pretreatment, effect on catecholamine actions in guinea-pig ileum, 201
- release from cholinergic nerve terminals, role in anthopleurin-B-induced contractions, in guinea-pig, 239
- responses of spinal cord neurones, effect of baclofen, 373

- -, role in reflex control in the conscious rat, 170P
- , turnover, effects of agents which alter calcium metabolism in rat diaphragm, 461
- , vasodepressor dose-response curves, effect of ranitidine in anaesthetized dog, 55
- Acetylcholine-activated channels, blockade by polymyxin B 41
- Acetylcholine antagonists, effects on anticholinesteraseinduced twitch potentiation in rat isolated diaphragm, 545P
- Acetylhomotaurine, interaction with γ-aminobutyric acid receptor sites and its effects on the central nervous system, 163P
- Acetylsalicylic acid, plus dipyridamole, effect on the balance between prostacyclin and thromboxane in human serum, 299
- **Acinar cells**, site of direct action of  $\beta$ -adrenoceptor agonists, 271
- Actinomycin D, inhibition of oestrogen-induced increase in uterine wet and dry weight in rat but not in sheep. 550P
- Action potentials, induction by 4-aminopyridine, 159P

  —, of rat skeletal muscle fibres, after chronic application of

  (-)-emetine to the nerve, 112P
- Acute phase reactant proteins, lowering by ICI 55897 in treatment for arthritis, 523P
- Adenine, effect on dose of arachidonic acid required to produce a 50% fall in blood pressure in rabbit, 521P
- Adenine nucleotides, effect on canine arterial preparations with endothelium removed, which had previously been made to contract to noradrenaline, 510P
- Adenosine, inotropic effects on guinea-pig atrium, potentiation by dipyridamole, 587P
- A denosine diphosphatase, stimulation of respiration in rat liver mitochondria effect of diflunisal, 552P
- Adenosine diphosphate, effect on canine arterial preparations with endothelium removed, which had previously been made to contract to noradrenaline, 510P
- **Adenosine 5'-diphosphate,** induction of platelet aggregation, effect of CCI 17810 and aspirin, 697
- , induction of platelet aggregation, inhibition by 5'-Nethylcarboxamidoadenosine, 443
- , inhibition of prostaglandin E<sub>1</sub>-stimulated adenylate cyclase, lack of effect of 5'-N-ethylcarbamoxamidoadenosine, 443
- Adenosine monophosphate, effect on canine arterial preparations with endothelium removed, which had previously been made to contract to noradrenaline, 510P
- Adenosine 3',5'-monophosphate, cyclic, histamineinduced elevation, inhibition by [3H]-cimetidine or [3H]-ranitidine in isolated rabbit gastric cell, 547P
- , cyclic, increased levels after 5'-N-ethylcarbamoxamidoadenosine in platelet, 443
- , dibutyryl cyclic, stimulation of prostaglandin E<sub>2</sub> in rat isolated stomach, 291
- , N<sup>6</sup>-2'-0-dibutyryl, effects on rectal and skin temperature in the restrained rat, 565P
- —, N<sup>6</sup>-2'-0-dibutyryl, effect on thermoregulation in restrained mice, 566P
- Adenosine triphophatase, calcium activated, effect of disodium cromoglycate in rat peritoneal mast cells, 549P
- , calcium-activated, reduction of activity by nonidet P40, 95
- , sodium-potassium dependent, active site directied alkylation by digitalis sulphonate derivatives of different

lipophilicity, 25

 , sodium-potassium dependent, magnesium activated, partial inhibition of activity by ouabain, 31

A denosine triphosphate, effect of diflunisal on hydrolysis in rat liver mitochondria, 552P

- , effect on canine arterial preparations with endothelium removed, which had previously been made to contract to noradrenaline, 510P
- --- , effect on histamine releasing capacity of nonidet P40treated mast cells, 95
- , induction of tachyphylaxis to subsequent treatment with adenosine triphosphate of histamine in humans, 516P
- —, mechanism for production of cutaneous inflammation in humans, 516P

A denylate cyclase, dopamine-stimulated, abolition of activity by kainate-induced lesions, 124P

- H<sub>2</sub> dependent system, in relation to [<sup>3</sup>H]-cimetidine binding in guinea-pig gastric mucosa, 548P
- , prostaglandin E<sub>1</sub>-stimulated, inhibition by adenosine 5'-diphosphate, lack of effect of 5'-N-ethyl-carboxamidoadenosine, 443

Adipose tissue, age-related changes, 106P

Adjuvant-induced arthritis, inhibitory effects of indomethacin and ICI 55897 in rats, 551P

Adrenal demullation, abolition of hypotensive response to bromocriptine in spontaneously hypertensive rats, 419

Adrenal gland, guinea-pig perfused, effect of scorpion venom and grayanotoxin I on catecholamine secretion,

- -- , involvement in hypotensive response to bromocriptine in spontaneously hypertensive rats, 419
- , rat, effect of reserpine on Met-enkephalin like material concentrations, 146P

Adrenal medulla, cat, exocytotic secretion induction by sodium deprivation: involvement of calcium influx mechanism, 305

Adrenaline, action in guinea-pig ileum, 201

- , effect on acetylcholine-induced contractions in pregnant rat uterus, 530P
- , effect on peripheral and central airway smooth muscle in vitro, in guinea-pig, 533P
- , effect on synthesis of prostaglandin  $E_2$  and  $F_{2\alpha}$  by rat cerebral cortex, 525P
- -, high enzyme discharge potency, 271
- , hindlimb pressor response, effect of rauwolscine and prazosin, 121P
- , induction of cardiovascular depressor effects in conscious dogs, 520P
- , induction of hepatic alkaline phosphatase, involvement of adrenoceptors in mice in vivo, 8
- , induction of platelet aggregation, effect of CCI 17810 and aspirin, 697
- , induction of platelet aggregation, inhibition by 5'-Nethylcarbamoxamido-adenosine, 443
- pressor response in rats, effect of coryanthine and rauwolscine in the presence and absence of propranolol, 519P
- , reduction of stimulation-evoked release of noradrenaline in the rabbit hypothalamus, in the presence of cocaine, 497P
- , release from adrenal medulla, mediation of hypotensive response to bromocriptine in spontaneously hypertensive rats, 419

- , secretory response of rat parotid gland, effect of parasympathectomy, 534P
- Adrenergic function, changes caused by chronic cadmium treatment, effect of chemical sympathectomy in rat, 117P

Adrenergic nerves, excitation, cause of anthopleurin-Binduced relaxation of taenia caeci in guinea-pig, 239

- Adrenoceptor blocking agents, prevention of lysophosphatidylserine-induced histamine release from peritoneal mast cells, 108P
- α-Adrenoceptor agonists, action in guinea-pig ileum, 201
- —, blockade by prazosin and BE 2254 in pithed rats, 586P
- -, effect on immature rat vas deferens, 527P

β-Adrenoceptor agonists, action in guinea-pig ileum, 201

- -, effect of amylase secretion on rat parotid, 271
- $\alpha_1$ -Adrenoceptor antagonists, effect on inhibitory effects of desipramine on firing rate of locus coeruleus cells in rat, 498P
- $\alpha_2$ -Adrenoceptor antagonists, effect on inhibitory effects of desipramine and clonidine on firing rate of locus coeruleus cells in rat, 498P
- β-Adrenoceptor antagonists, determination of dissociation constants of isoprenaline and orciprenaline and their relative efficacies on guinea-pig isolated atrium, 635
- —, effect on inhibitory effect of desipramine on firing rate of locus coeruleus cells in rat, 498P
- α-Adrenoceptor blockade, by bromocriptine in spontaneously hypertensive rats, 419
- , on responses to phenylephrine and noradrenaline in rabbit, 119P
- , potency of halo-alkylamines on rat anococcygeus in relation to potentiation of noradrenaline or isoprenaline on guinea-pig trachealis, 531P
- α-Adrenoceptor blocking drugs, attenuation of rabbit hypothalamo-cardioinhibitory response, 515P
- -, effect on finger tremor, 134P
- , effect on hypotensive response to bromocriptine in spontaneously hypertensive rats, 419
- , method for assessing effects on isoprenaline-induced tremor, 133P

**β-Adrenoceptor sites,** increased density in rat parotid gland, after parasympathectomy, 534P

Adrenoceptors, identification in pregnant rat uterus, 530P  $\alpha$ -Adrenoceptors, agonist action of Sgd 101/75 in rat

- anococcygeus, 535P
- , antagonist action of Sgd 101/75 in guinea-pig ileum, 535P
- , distribution and types in guinea-pig ileum, 201
- , in spinal cord, role in myocardial infarction-induced cardiac arrhythmias in dogs, 192P
- mediation of inhibitory effect of dopamine on contractions evoked by transmural electrical stimulation, 537P
- , neuronal and smooth muscle, effects of yohimbine analogues in rat vas deferens, 526P
- , partial agonist action in guinea-pig ileum of Sgd 101/75, 535P
- , peripheral, effect of 6-hydroxydopamine in vivo, and in vitro using radioligand binding techniques, 119P
- -, pre- and post-synaptic, in rabbit hind limb, 120P
- $\alpha_1$ -Adrenoceptors, mediation of cardiovascular effects of phenylephrine in pithed rats, 585P
- mediation of pressor responses of adrenaline, analysis in rat, 519P
- -, synaptic location in dog vascular smooth muscle, 123P

- $\alpha_2$ -Adrenoceptors, extrasynaptic location in dog vascular smooth muscle, 123P
- , mediation of cardio-vascular effects of phenylephrine in pithed rats, 585P
- , mediation of pressor responses of adrenaline, analysis in rat 519P
- , postsynaptic location in smooth muscle of blood vessels, 121P
- **β-Adrenoceptors**, decrease in binding, following chronic administration of imipramine, 154P
- -, distribution and types in guinea-pig ileum, 201
- , labelling by [1251]-hydroxybenzylpindolol, in cerebral cortex, 165P
- —, mediation of noradrenaline-induced increase in prostaglandin  $E_2$  and  $F_{2\alpha}$  in rat cerebral cortex, 525P
- $\beta_I$ -Adrenoceptors, mediation of cardio-vascular effects of phenylephrine in pithed rats, 585P
- $\beta_2$ -Adrenoceptors, involvement in induction by adrenaline of hepatic alkaline phosphatase in mice *in vivo*, 8
- , mediation of cardio-vascular effects of phenylephrine in pithed rats, 585P
- Adrenocorticotrophic hormone 1-24, histamine releasing capacity, effect on nonidet P40-treated mast cells, 95
- **Adrenocorticotrophin,** and prolactin secreting tumour, effect on brain and pituitary concentrations of  $\beta$ -endorphin and methionine-enkephalin, 167P
- Age, effect on monoamine oxidase activity in isolated rat perfused lung and lung homogenates, 731
- –, effect on uptake of 5-hydroxytryptamine and β-phenylethylamine in isolated rat perfused lung and lung homogenates, 731
- Aggressive behaviour, effect of (+)-amphetamine or translcypromine and L-tryptophan in spontaneously hypertensive rats, 579P
- **Aging,** effect on antilipolytic action of nicotinic acid, 106P **AH7170,** modification of uterotrophic responses to oestradiol-17 $\beta$  in rat, 550P
- AH 19437, a specific thromboxane receptor blocking drug, 524P
- **β-Alanine**, effect on γ-aminobutyric acid inhibition of field-stimulated guinea-pig vas deferens, 142P
- Alkylation, active site-directed, of sodium-potassium dependent adenosine triphosphatase by digitalis sulphonate derivatives, 25
- Allergen, induction of histamine release in the presence of extracellular calcium, inhibition by lanthanide ions, 341
- $\alpha$ -Allokainic acid, high doses, production of circling and seizure activity in rat, 570P
- Allopurinol, suppression of effects of purines on dose of arachidonic acid required to produce a fall in blood pressure in rabbit, 521P
- Alprenolol, inhibition of lymphocyte capping and transformation, 69
- Amfonelic acid, effect on [<sup>3</sup>H]-dopamine release evoked by electrical stimulation, 499P
- Amiloride, reduction of urinary magnesium excretion in conscious saline loaded rats, 285
- Amine oxidase, from pig plasma, antibodies to, immunological reactions of porcine tissues, 146P
- -, subcellular localization of two forms in rat aorta, 510P
- 2-A mino-6,7-dihydroxy-1,2,3,4-tetrahydro-naphthalene (ADTN), effect on renal blood flow and renal vascular resistance in guinea-pig, 507P

- , inhibition of specific striatal binding of [<sup>3</sup>H]-sulpiride, 129P
- **2-Amino-4-phosphonobutyric acid,** effect on kainic acidinduced circling in rat, 570P
- (+)-2-Amino-5-phosphonovaleric acid, plus (±)-cis-2,3piperidine dicarboxylic acid, effect on kainic acidinduced circling in rat, 570P
- **D-α-Aminoadipate**, effect on monosynaptic excitatory responses of cat spinal cord neurones, 373
- **cis-1,3-Aminocyclohexane carboxylic acid,** potentiation of γ-aminobutyric acid inhibition of field stimulated guinea-pig vas deferens, 142P
- γ-A minobutyric acid, activity in intracellularly-recorded dorsal root ganglia, 355
- -, central nervous system derived, influence on plasma γ-aminobutyric acid concentrations and prolactin secretion, 150P
- , effect on monosynaptic excitatory responses of cat spinal cord neurones, 373
- -, efflux from rat cerebral cortex, effect of KCl, 149
- , inhibition of field-stimulated guinea-pig vas deferens,
   142P
- , inhibition of vasopressin release in response to carotid occlusion, 17
- , plasma concentrations, effect of central nervous system derived γ-aminobutyric acid, 150P
- , presynaptic actions on rat isolated sympathetic ganglia demonstrated in presence of 4-aminopyridine, 159P
- —, radioreceptor assay using [<sup>3</sup>H]-muscimol, 164P
- -- receptor sites, interaction with N-acyl and N-sulphonyl derivatives of homotaurine, 163P
- tissue levels and release, effect of concentrations of neuroleptics up to 10<sup>-4</sup> m in rat striatal synaptosomes, 427
- γ-Aminobutyric acid agonists, action on dorsal root ganglionic neurones, 355
- γ-Aminobutyric acid antagonists, effect of SL75 102 or γ-aminobutyric acid on sensitivity of dorsal root ganglionic neurones, 355
- γ-Aminobutyric acid-mimetic drugs, actions, 355
- γ-Aminobutyric acid receptors, muscimol-sensitive, antagonism by bicuculline, 156P
- 2-(2-A minoethyl) thiazole dihydrochloride, no stimulation of gastric acid secretion, 560P
- **Aminooxyacetic acid,** induction of analgesia, increase by bicuculline, 156P
- **Aminophylline,** lack of effect on relaxations induced by electrical stimulation or nicotine, 281
- 3-Aminopropanesulphonic acid see Homotaurine
- **4-A minopyridine,** antagonism of depressed endplate potentials quantal content produced by polymyxin B, 41
- , effect on evoked output of and tissue content acetylcholine in rat diaphragm preparations, 461
- , effect on oscillating current and other currents activated in cardiac Purkinje fibres, 117P
- , enhanced presynaptic excitability, study of nature of presynaptic GABA receptors, 159P
- , lack of effect on shortened endplate current duration produced by polymyxin B, 41
- **Amnesia,** retrograde, electroconvulsive shock-induced, protection from by neurotoxic lesion of the median raphe nucleus, 169P
- Amoxycillin, biliary excretion determined in vitro and in vivo, 185P

- **Amphetamine,** antagonism of 2-deoxy-(+)-glucosehyperphagic response, 161P
- -, effect of, in anaesthetized rats with removed dura, 149
- , induction of ipsiversive turning, enhancement by procyclidine and hyoscine in unilaterally lesioned mice, 277
- , effect on cyclic guanosine 3',5' monophosphate concentrations in tissue slices from dopaminesupersensitive striata, 495P
- , effect on [<sup>3</sup>H]-noradrenaline evoked by electrical stimulation in rat cortex and rabbit hypothalamus, 499P
- -, effect on sensitivity to halothane in rats, 573P
- , effect on uptake and retention of [3H]-dopamine in rabbit caudate nucleus, 499P
- , inhibition of electrical stimulation-evoked release of [3H]-dopamine from rabbit caudate nucleus, 499P
- production of rebound decrease of central nervous system excitability in rat, 573P
- (+)-Amphetamine, effect on exploratory and social behaviour in spontaneously hypertensive rats, 579P
- , effect on uptake and release of [<sup>3</sup>H]-dopamine from a crude striatal synaptosome preparation, 126P
- , enhanced locomotor activity in dimethylsulphoxideinjected rats, 493P
- , stimulation of release of newly taken up dopamine in median eminance, 160P
- Ampicillin, biliary excretion determined in vivo and in vitro, 185P
- , effect on absorption of oestrone sulphate from small intestine and caecum in the rat, 541P
- Amygdala, effect of kindling on cyclic guanosine 3'5' monophosphate concentrations in rats, 500P
- , kindling, induction of epilepsy, effect of grand-mal drugs in rat, 501P
- Amylase, secretion from rat parotid gland, effect of various  $\beta$ -adrenoceptor agonists, 271
- Anaesthesia, barbiturate, reduction of (+)-amphetamineinduced release of striatal dopamine, 126P
- , decrease of glutamate efflux in rats with intact dura, 149P
- **Anaesthetics,** effect on bradycardia produced by oxymetazoline and clonidine in rats, 107P
- Analgesia, baclofen-induced, effect of naloxone, bicuculline, atropine and ergotamine, 156P
- , induction by intracerebroventricular injection of calcitonin but not by subcutaneous injection in mouse, 575P
- morphine-induced, effects of melanotrophin release inhibiting factor and cyclo(Leu-Gly) on tolerance in rat, 707
- tolerance to, effects of morphine and D-ala<sup>2</sup> methionine-enkephalin on onset and offset, 166P
- Anaphylaxis, effect on stomach motility in guinea-pig, 536P
- modulation in vitro by 5,8,11,14-eicosatetraynoic and Ro3-1314, role of arachidonic acid, 689
- Anemonia sulcata toxin II, effect on normal and chronically denervated mammalian neuromuscular junctions, 546P
- Angiotensin, interaction with sympathetic nervous system during lower body negative pressure in cat, 514P
- Angiotensin II, cardioinhibitory response, effect of prazosin and BE 2254 in pithed rats, 586P

- , contractile effect on bovine isolated umbilical arteries in comparison with [125I]-angiotensin II binding by a subcellular fraction of that tissue, 247
- Sar<sup>1</sup> Ala<sup>8</sup> angiotensin II see Saralsin
- (Sar¹ -Ile³)-angiotensin II, effect on release of angiotensinlike substance by renin, 511P
- **Angiotensin converting enzyme,** inhibition of activity by captopril in rabbit plasma, 645
- Angiotensin-like substance, release by renin, contribution to anti-hypertensive activity of captopril, 511P
- Angiotensin receptors, in bovine umbilical artery and their inhibition by nonsteroidal anti-inflammatory drugs, 247
- **Angiotensins,** effect on drinking behaviour of rats and pigeons, 162P
- , production of concentration-dependent contractile responses of goat isolated pulmonary arteries, 233
- **Animal charcoal,** effect on levels of 2,3,7,8-tetrachlorodibenzo-p-dioxin in liver 2 weeks after a single dose, 181P
- Anococygeus muscle, rabbit and rat, effect of ethanol on motor and inhibitory responses, 528P
- -, rat, action of Sgd 101/75 on α-adrenoceptors, 535P
- rat, effects of indapamide on responses to electrical stimulation or noradrenaline administration, 172P
- , rat, effects of venom of Sydney funnel-web spider on motor transmission and inhibitory transmission, 335
- -- , rat, in vitro comparison of haloalkylamine activity with activity in guinea-pig trachealis muscle, 531P
- Anorectic drugs, effect on the hyperphagic response induced by insulin or 2-deoxy-(+)-glucose glucoprivation, 161P
- Anorexia, action of fenfluramine in rats, 621
- production in chickens, turkey poults and ducklings by furazolidone, 555P
- Antacid preparation, effect on indomethacin-induced lesions and gastric pH in rats, 559P
- **Anthopleurin-A**, dual action on isolated ileum and taenia caeci of the guinea-pig, 239
- Anthopleurin-B, possible mechanism of the dual action in the isolated ileum and taenia caeci of the guinea-pig, 239
- Anti-IgE, induction of histamine release in the presence of extracellular calcium, inhibition by lanthanide ions, 341
- , capping on the surface of murine B lymphocytes, inhibition by propranolol and related compounds, 69
- **Anti-inflammatory activity,** of 5-hydroxytryptamine in goat pulmonary veins, 233
- Anti-inflammatory agents, inhibition of effects of inflammatory agents on lysosomal fragility of endothelial cells from human umbilical veins, 603
- Antiarrhythmia, effect of bepridil, in early stages of canine acute myocardial infarction, 114P
- Antibiotics, biliary excretion determined in vivo and in vitro, 185P
- , to pig plasma amine oxidase, immunological reactions of porcine tissues, 146P
- Anticholinergic activities, of DL-308, thioridazine and atropine, 131P
- Anticholinesterase, induction of twitch potentiation, effects of acetylcholine antagonists in rat isolated diaphragm preparations, 545P

- Anticoagulant activity, of dermatan sulphates mode of action, 81
- Antidysrhythmic drugs, class 3 and 4, effectiveness for prevention of early post-infarction ventricular dysrhythmias in rat, 512P
- **Antigen,** induction of contractions in tracheal spiral from sensitized guinea-pig, effect of 5,8,11,14-eicosatetraynoic acid or Ro3-1314, 689
- Antihistamines, prevention of lysophosphatidylserineinduced histamine release from peritoneal mast cells, 108P
- Antilipolytic effects, of nicotinic acid, age-related changes, 106P
- Antimetastatic activity, of dimethyltriazenes, 107P
- Antimycin, abolition of lysophosphatidylserine-induced histamine release from peritoneal mast cells, 108P
- Antisecretory action, of prostaglandin and prostacyclin analogues against different secretagogues in perfused whole-stomachs of rat or mouse, 291
- Antithrombin III, induction of inhibition of serine proteinases, effect of dermatan sulphatases, 81
- Antithrombin III antiserum, effect on dermatan sulphates anti-coagulant activity, 81
- **Aorta,** guinea-pig, investigation of characteristics of post junctional purinergic receptors, 587P
- , rabbit isolated, effect of nimodipine and bencyclan on noradrenaline or potassium induced contractions, 582P
- , rat, antagonism of action of noradrenaline by flunarizine and cinnarizine, 583P
- -- , rat, comparison of effects of various tryptamine analogues in vitro, 517P
- , rat, effect of AH 19437 on concentration-effect curves to U-46619 and dose-effect curves to thromboxane A<sub>2</sub>, 524P
- , rat, effects of desensitization produced by repeated injection of 5-hydroxytryptamine, 581P
- , rat, identification of the specific binding sites of flunarizine, 517P
- , rat, subcellular localization of two forms of amine oxidase, 510P
- , rat and rabbit, gender differences in prostaglandin receptors, 10
- Apexcardiogram, effect of cimetidine or ranitidine, 131P Apomorphine, administered to nucleus mesencephalicus profundus, production of ipsilateral head-neck deviation and stereotyped head-neck movements, 123P
- , effect on stimulation-evoked release of noradrenaline from hypothalamus, 497P
- , induction of hypothermia, blockade of morphineenhancement by melanotrophin release inhibiting factor and cyclo(Leu-Gly) in rat, 707
- , induction of stereotyped behaviour, enhanced by continuous trifluoperazine administration in rat, 569P
- , induction of stereotyped behaviour after microinfusion into nuclei of brain stem and optic ventricle, 124P
- , induction of stereotypes, effect of surgical destruction of corticostriatal projections, 128P
- , inhibition of specific striatal binding of [<sup>3</sup>H]-sulpiride, 129P
- , lack of effect on release of [<sup>3</sup>H]-dopamine elicited by potassium, 160P
- -, lack of stimulation of release of growth hormone, in

- rats with kainic lesions, 151P
- **Apoyohimbine,** effect on neuronal and smooth muscle α-adrenoceptors in rat vas deferens, 526P
- **Aprotinin,** inhibition of production of bradykinin-like substance by renin, 511P
- Arachidonate cyclo-oxygenase products, synthesis by rheumatoid and non-rheumatoid synovial tissue in humans, 522P
- Arachidonic acid, decrease in vascular resistance in isolated perfused stomach under conditions of elevated vascular resistance, 139P
- , dose required to produce a 50% fall in blood pressure in rabbit, correlation with hypoxanthine and uric acid plasma levels, 521P
- , induction of mortality, effect of aspirin and CCI 17810 in mice, 697
- , induction of platelet aggregation, effect of CCI 17810 and aspirin, 697
- —, metabolism, and modulation of in *vitro* anaphylaxis by 5,8,11,14-eicosatetraynoic acid and Ro3-1314, 689
- Arterial strips, ox, cat, rabbit or rat, production of relaxation by inhibitory extract from bovine retractor penis muscle, where tone is produced by various spasmogens, 365
- Artery, canine isolated femoral, effect of removal of endothelium on reactivity to acetylcholine and adenine nucleotides, 510P
- , rabbit isolated, effect of nimodipine and bencyclan on 5-hydroxytryptamine-induced contractions, 582P
- **Arthritis,** chronic and developing, inhibition by ICI 55897, 523P
- , collagen-induced or adjuvant-induced, effect of indomethacin or ICI 55897 in rats, 551P
- L-Aspartate, action on lobster muscle, mimicked by Lcysteate, 113P
- , responses of spinal cord neurones, effect of baclofen,
   373
- **Aspirin,** effect on platelet aggregation and adhesiveness, 697
- , effect on platelet and gastric prostaglandin-synthetase in humans, 141P
- , effect on relationship between broncho-constriction and thromboxane A<sub>2</sub>, 140P
- —, effect on sedative activity of Δ'-transtetrahydrocannabinol, cannabis herb and water soluble fraction and chlorpromazine in mice, 649
- —, inhibition of cataleptic action of  $\Delta'$ -transtetrahydrocannabinol in mouse, 401
- , inhibition of myocardial thromboxane B<sub>2</sub> release and ventricular ectopic activity following coronary artery occlusion in dogs, 593
- , production of dose-related inhibition of acetic acidinduced abdominal constrictions in mouse, 575P
- **Atenolol,** effect on dose response curves for tremor and tachycardia following isoprenaline, 133P
- , effect on finger tremor, 134P
- , effect on hypotensive response to bromocriptine in spontaneously hypertensive rats, 419
- Atrium, guinea-pig, action of ranitidine, 49
- —, guinea-pig, inotropic and chronotropic responses to isoprenaline and orciprenaline, 635
- , guinea-pig, investigation of characteristics of post junctional purinergic receptors, 587P

, rat, presynaptic effects of isoprenaline, D600 and dantroline, 191P

**Atropine,** abolition of gastric acid secretory response to methacholine in rabbit isolated fundic mucosa, 560P

- —, antagonism of acetylcholine contractions, 171P
- -, antagonism of oxotremorine analgesia, 156P
- , comparison of anticholinergic activities with DL-308 and thioridazine, 131P
- , comparison of size in solution with that of protonated and non-protonated forms of hyoscine and hyoscine N-oxide, 657
- , effect on choline increased gastric acid secretion and on reduction of potential difference in rat gastric mucosa, 562P
- , effect on development of indomethacin-induced gastric erosions in rat, 559P
- —, effect on 5-hydroxytryptamine- and tryptamineinduced changes in core temperature in rats, 477
- —, effect on manual co-ordination in the marmoset, 494P
- —, enhancement of electrical stimulation-elicited increase in high affinity choline uptake into guinea-pig brain slices, 148P
- , inhibition of anthopleurine-B in taenia caeci in guineapig, 239
- , inhibition of [<sup>3</sup>H]-quinuclidinyl benzilate binding to muscarinic cholinoceptors, 179P
- , lack of effect on 5-hydroxytryptamine-induced venorelaxation, 233
- , lack of effect on relaxations induced by electrical stimulation or nicotine, 281
- , no antagonism of baclofen analgesia, 156P
- , plus hexamethonium, reduction of increased catecholamine output induced by grayanotoxin I and scorpion venom, 61
- , pretreatment, relaxation of tissues in response to field stimulation and extrinsic nerve stimulation in guineapig, 554P
- , suppression of contractile responses to field stimulation and to extrinsic nerve stimulation in guinea-pig trachealis, 554P

**Autonomic neuromuscular transmission,** action of venom of Sydney funnel-web spider, 335

**Avoidance performance,** effect of low doses of methylmercury, 168P

## В

**Bacampicillin,** biliary excretion determined in vivo and in vitro, 185P

**Background current,** effect of 4-aminopyridine and caesium in cardiac Purkinje fibres, 117P

**Baclofen,** intravenous administration, effect on synaptic and chemically-induced excitation of cat spinal neurones, 373

- , selective depression of synaptic excitation in cat spinal neurones by baclofen: an iontophoretic study, 373
- -- , effect on monosynaptic excitatory responses of cat spinal cord neurones, 373
- , induction of analgesia, effect of naloxone, bicuculline, atropine and ergotamine, 156P
- (-)-Baclofen, effect on mono- and poly-synaptic excitation of spinal cord nerones, 373

-, induction of high degree of analgesia, 156P

**Barbiturate anaesthesia,** reduction of (+)-amphetamine-induced release of striatal dopamine, 126P

**Barium,** induction of rhythmic contractions in rat vas deferens, effect of calcium antagonists, 563P

 , substitution for calcium in sodium-free medium, effect on catecholamine secretion from cat adrenal medulla, 305

**Barium ions,** induction of tone in arterial preparations, relaxation by inhibitory extract from bovine retractor penis muscle, 365

Baro-reflex cardioinhibition, no attenuation by α-adrenoceptor blocking drugs in rabbit, 515P

**Baro-reflex sensitivity,** reduction by central substance P. 577P

Baroreceptor-heart rate reflex, effect of 6-hydroxydopamine during muscle ischaemia in unaesthetized rat, 508P

**Basic agents**, induction of histamine release in rat peritoneal mast cells, effect of lanthanide ions, 341

**Basilar artery,** human, comparison of effects of various tryptamine analogues *in vitro*, 517P

-, human, partial agonist effect of spiperone, 581P

Be 2254, α-adrenoceptor blocking potency, 586P

**Behavioural effects,** qualitative or quantitative differences between chlordiazepoxide and chlorpromazine, 167P

**Behavioural responses,** effect of clonidine and guanabenz in rat, 580P

Bemegride, effect on sensitivity to halothane in rats, 573P Bencyclan, effect on cerebral and peripheral vascular smooth muscle in rabbit, 582P

**Benserazide,** differential effect on the concentration of indoleamines in rat pineal and hypothalamus, 257

**Benzamides,** inhibition of specific striatal binding of [<sup>3</sup>H]-sulpiride, 129P

**Benzomorphans,** agonist effect in guinea-pig ileum and mouse vas deferens, 13

-, antagonist effect in rat vas deferens, 13

**Benztropine**, blockade of amphetamine increased [<sup>3</sup>H]-dopamine release, 126P

 , effect on uptake and release of [<sup>3</sup>H]-dopamine from crude striatal synaptosome preparation, 126P

**Bepridil**, antiarrhythmic, haemodynamic and metabolic in early stages of canine acute myocardial infaction, 114P

**Bethanechol,** induction of contractions in guinea-pig ileum, lack of effect of ranitidine, 49

**Bicuculline**, abolition of γ-aminobutyric acid-inducedaction potentials and ESPS, 159P

- —, effect on responses of dorsal root ganglionic neurones to SL 75 102 or γ-aminobutyric acid, 355
- , increase in aminooxyacetic acid-induced analgesia, 156P
- , interaction with  $\gamma$ -aminobutyric acid receptor sites and its effects on central nervous system, 163P
- -, no antagonism of baclofen analgesia, 156P

**Bile,** composition and flow, effect of individual monoterpenes, 104P

-, flow, effect of individual monoterpenes, 104P

**Biliary excretion,** of β-lactamines and cefazedon determined *in vivo* and *in vitro*, 185P

**Binding sites,** in brain and platelets, parallel changes in [<sup>3</sup>H]-imipramine binding following chronic treatment with imipramine, 154P

—, [3H]-sulpiride, reduction in rat striatum following de-

cortication or striatal kainic acid lesions, 130P

**Binodaline,** a novel antidepressant drug, pharmacological spectrum, 573P

**Biventer cervicis muscle preparation,** induction of contractures, effect of methohexitone, 111P

**Bladder**, cat and baboon, effect of hyoscine on responses to electrical stimulation, 176P

-- , rabbit, effect of emulsifiers on elimination of fat emulsions, measured by gamma scintigraphy, 180P

**Blood**, lipoxygenase products from within decidual blood vessel, suppression of uterine prostacyclin formation, 138P

Blood flow, coronary, increase after berpedil, 114P

—, in rabbit skin, effect of intradermal leukotriene  $B_4$  or prostaglandin  $E_2$ , 483

**Blood mononuclear cells,** human, antiproliferative effects of cyclosporin-A and glucocorticosteroids, 588P

**Blood pressure**, arterial, after sinoaortic denervation, effect of captopril or saralsin, 645

- —, arterial, effect of  $\alpha$ -adrenoceptor blocking drugs in rabbit, 515P
- , arterial, effect of centrally administered 6hydroxydopamine during muscle ischaemia in unaesthetized rat, 508P
- -, arterial, effect of HWA 285 in dogs and rabbits, 723
- , arterial, effect of intracisternally administered Substance P in rabbit, 577P
- -- , arterial, increase after physostigmine, decrease after hemicholinium-3, 170P
- , arterial and venous, effect of lower body negative pressure, SQ 20881 and Saralsin in cats, 514P
- -- , cadmium-induced increase, effect of chemical sympathectomy in rats, 117P
- , decrease after bepridil, 114P
- , dose-related reductions by adrenaline in conscious dogs, 520P
- -, effect of cadralazine and its identified metabolites,
- -, effect of cimetidine or ranitidine, 131P
- -, effect of clonidine and guanabenz in rat, 580P
- , effect of isolation in hypertensive spontaneously hypertensive rats, 579P
- , effect of noradrenaline and phenylephrine blockade by prazosin and BE 2254 in pithed rats, 586P
- , effect of sulphinpyrazone in open chested anaesthetized dogs, 5
- , lack of effect of inhibitory extract from bovine retractor penis muscle, in rat, 365
- , reduction by piperoxan, phentolamine and phenoxybenzamine in rat, 580P
- --- , response to phenylephrine or noradrenaline, effect of α-adrenoceptor blockade, 119P

**Blood pressure models,** effect of substance P in rat, 504P **Borneol,** effect on bile flow, bile composition and hepatic HMGR activity in rat, 104P

**Bovine retractor penis muscle,** effect of ethanol on inhibitory and motor responses, 528P

Bradycardia, adrenaline-induced in conscious dogs, 520P

- , bepridil-induced, in dogs with coronary artery ligation, 114P
- , clonidine-induced, influence of anaesthetic agent in rats, 107P
- , oxymetazoline-induced, influence of anaesthetic agent in rats, 107P

- -- , production by clonidine and guanabenz, effect of piperoxan, phentolamine and phenoxybenzamine in rat, 580P
- , production by intracisternally administered Substance
   P in rabbit, 577P
- , stimulus-evoked, effect of α-adrenoceptor blocking drugs in rabbit, 515P
- yagal stimulation-induced, effect of tolerance on morphine inhibition in the rat, 584P

## Bradycardia see also Heart rate

**Bradykinin,** induction of concentration-dependent contractile response of goat isolated pulmonary arteries, 233

- , induction of inhibition in rabbit anococcygeus muscle, effect of ethanol, 528P
- , bronchospasmogenic activity, in relation to thromboxane A<sub>2</sub> formation, 140P
- , induction of dose-dependent contractile responses of goat isolated pulmonary veins, 233
- , induction of decrease in lysosomal fragility in endothelial cells from human umbilical veins, 603
- , together with leukotriene B<sub>4</sub> or prostaglandin E<sub>2</sub>, effect of intradermal injection on plasma exudation in rabbit and guinea-pig, 483

**Bradykinin-like substance**, release by renin, contribution to anti-hypertensive activity of captopril, 511P

**Brain**, cat, parallel changes with platelets following chronic imipramine treatment, in [<sup>3</sup>H]-imipramine binding sites, 154P

- , chicken, duckling and turkey, monoamine oxidase inhibition by furazolidone, 555P
- -- , rabbit, increase in blood flow by intravenous administration of HWA 285, 723
- —, rat, effect of hyperprolactinemia on β-endorphin and Met-enkephalin concentrations, 167P
- , rat, effects of imipramine on the accumulation of [<sup>3</sup>H] 5-hydroxytryptamine into subfractions, 488P
- —, rat, guinea-pig and mouse, no detection of N<sup>α</sup>-methylhistamine by sensitive, specific radioenzymatic assay, 505P
- , rat, opiate receptors, no significant occupation by lofentanil, 487P

Brain slices, guinea-pig, effect of electrical stimulation, high potassium ion concentrations, atropine and physostigmine on high affinity choline uptake, 148P

**Brain stem,** application of γ-aminobutyric acid or glycine, inhibition of vasopressin release, 17

**Breast milk,** levels of acebutolol and N-acetyl acebutolol, transfer to newborn, 135P

**Bremazocine,** agonist in guinea-pig ileum and mouse vas deferens, 13

-, antagonist in rat vas deferens, 13

**Bromocriptine**, antagonism of hyperphagic response to 2-deoxy-(+)-glucose, 161P

- , effect of pretreatment on pressor response to adrenaline in spontaneously hypertensive rats, 419
- , hypotensive response in spontaneously hypertensive rats, involvement of adrenal glands, 419
- , receptor occupation and in vivo pharmacological effects in rat, 487P

**Bronchoconstriction**, and thromboxane A<sub>2</sub> formation: effect of aspirin, 140P

**β-Bungarotoxin,** reduction of contraction of ileal longitudinal muscle of guinea-pig elicited by muscarine, 225

- (+)-Butaclamol, inhibition of specific striatal binding of [<sup>3</sup>H]-sulpiride binding, 129P
- **Butyrophenone neuroleptic drugs,** effectiveness for prevention of early post-infarction ventricular dysrhythmias in rat, 512P

C

- Cadmium, effect on responsiveness of isolated perfused kidney to periarterial stimulation, noradrenaline and potassium ions, 189P
- Cadmium ions, chronic treatment, effect on adrenergic function, effect of chemical sympathectomy, 117P
- Cadralazine, effect on blood pressure and arterial smooth muscle, 188P
- Caerulin, effect on gastric emptying of a liquid meal in rat, 103P
- **Caesium,** on oscillating current and other currents activated in cardiac Purkinje fibres during the clamp, 117P
- Calcitonin, comparison of analgesic effects of subcutaneous and intracerebroventricular injection on acetic acid-induced abdominal constrictions in mouse, 575P
- —, mode of action on indomethacin-induced gastric erosions in rat, 559P
- Calcium, concentration of medium, effect on action of disodium cromoglycate on calcium-adenosine triphosphate activity in rat peritoneal mast cells, 549P
- , concentration in solution, effect on increased perfusion pressure evoked by noradrenaline in rat aorta and mesenteric artery, 583P
- —, counteraction of morphine inhibition and morphine plus naloxone facilitation of acetylcholine release, 158P
- , effects of agents which alter metabolism, effect on acetylcholine turnover in rat diaphragm preparation, 461
- , effects of various concentrations on membrane potential of smooth muscle cells of guinea-pig mesenteric vessels, in presence or absence of vasopressin or noradrenaline, 673
- -, effects on manganese activated pyruvate kinase, 506P
- , external, effect on inhibitory action of cadmium in isolated perfused kidney, 189P
- , extracellular, effect on spontaneous quantal transmitter release induced by Anemonia sulcata toxin II, 546P
- , induction of contractions in potassium ion-depolarized smooth muscles, effects of calcium ion-antagonists, 144P
- , influx mechanism, involvement in exocytotic secretion of catecholamines from cat adrenal medulla by sodium deprivation, 305
- , levels, relationship with taurine levels and contractile force in guinea-pig ventricular strips, 115P
- -, positive inotropic effects in ventricular strips, 115P
- , reduction in bathing media, suppression of tachyarrhythmias produced in rabbit right atria exposed to ouabain, 263
- —, withdrawal from KHS solution, effect on excitationcontraction coupling in sensitized guinea-pig trachea, 175P
- 45 Calcium, uptake by bovine chromaffin cells in relation to catecholamine secretion, 305
- Calcium antagonists, effectiveness for prevention of early

- post-infarction ventricular dysrhythmias in rat, 512P
- , effects on drug induced rhythmic contractions of rat vas deferens, 563P
- Calcium ionophore, A-23187, effect on acetylcholine release and tissue content in rat diaphragm preparations, 461
- Calcium ions, deprivation, antagonism of acetylcholineevoked catecholamine secretion from bovine isolated chromaffin cells, 31
- , effect of decreased concentrations on incorporation of [<sup>14</sup>C]-serine into phospholipid in guinea-pig ileum, 397
- , effect on concentration of guanosine 3'5' monophosphate in amygdala of kindled rats, 500P
- , extracellular, restoration of potassium contractures in rat isolated vas deferens, 143P
- increased intracellular concentration produces increased membrane potassium permeability in cockroach salivary gland, 556P
- , influence on cyclic guanosine 3'5' monophosphate concentrations in tissue slices from dopaminesupersensitive striata, 495P
- **Calcium dependence,** of the effect of scorpion venom and grayanotoxin I, 61
- Calcium sources, utilization in histamine-induced contractions of sensitized guinea-pig trachea, 175P
- **Camphene,** effect on bile flow, bile composition and hepatic HMGR activity in rats, 104P
- Cannabidiol, oral sedative potency in mice, 649
- Cannabis, activity in relation to its  $\Delta'$ -transtetrahydrocannabinol content in mice, 401
- —, herb and extracts, sedative activity in relation to Δ'trans-tetrahydrocannabinol and cannabidiol content, 649
- **Cannabis extracts,** presence of powerful inhibitor and synergist of  $\Delta'$ -trans-tetrahydrocannabinol cataleptic action in mouse, 401
- **Capsaicin,** behavioural and biochemical studies following injection into substantia nigra of rat, 493P
- **Captopril,** effect on blood pressure and plasma angiotensin converting enzyme activity after sinoaortic denervation in the rabbit, 645
- , hypertensive activity, contribution of vasodilators released by renin, 511P
- Carbachol, action on membrane potential, potassium efflux, and contraction of longitudinal muscle of guineapig intestine, 319
- , induction of inhibition in rabbit anococcygeus muscle, effect of ethanol, 528P
- , induction of motor responses in rat anococcygeus muscle, effect of ethanol, 528P
- Carbamazepine, effect of, on kindled amygdaloid epilepsy in rat, 501P
- Carbamazepoxide, effect on the intention tremor onset pressure and resting tremor onset pressure in mice, 502P
- Carbenicillin, biliary excretion determined in vivo and in vitro, 185P
- Carbobenzoxyhomotaurine, interaction with γ-aminobutyric acid receptor sites and its effects on the central nervous system, 163P
- Carbobenzoxyhomotaurylhomotaurine, interactions with γ-aminobutyric acid receptor sites and its effects on the central nervous system, 163P

- **Carbohydrate reserves,** mobilization by phosphatidylserine, 108P
- **Carbon fibre microelectrodes,** for electrophysiological and electrochemical studies, 507P
- Carcinogenic activity, of hydrazine derivative monomine oxidase inhibitors, 145P
- Cardiac arrhythmias, drive induced, importance of oscillatory current, 117P
- —, myocardial infarction-induced, role of α-adrenoceptors in spinal cord, 192P
- , post-infarction, role of thromboxane  $B_2$  release in dog, 593
- Cardiac muscle, isolated rat, lack of effect of inhibitory extract from bovine retractor penis muscle in rat, 365
- Cardiac myocyte ultrastructure, protection by diltiazem from hypoxia-induced cellular damage in isolated rabbit heart, 190P
- Cardiac output, increase after bepridil, 114P
- Cardioselectivity, of  $\beta$ -adrenoceptor blockers, inverse relationship with their ability to reduce isoprenaline-induced tremor, 133P
- Cardiotoxic effects, age related effects of ouabain in isolated rabbit atria, 263
- Cardiovascular depressor effects, adrenaline-induced, in conscious dogs, 520P
- Cardiovascular regulation, modulation by Substance P in rabbit brain stem, 577P
- Cardiovascular system, effect of inhibitory extract from bovine retractor penis muscle in ox, cat, rabbit or rat, 365
- Carotid body, cat, action of leucine- and methionineenkephalin on opiate receptors to suppress chemoreceptor activity in cats, 544P
- Carotid occlusion, inhibition of vasopressin release by  $\gamma$ -aminobutyric acid and glycine, 17
- Carrageenan foot oedema, changes in serum copper concentrations and ceruloplasmin activity, 137P
- Carrageenan paw oedema, inhibition by dexamethasone requires de novo synthesis of putrescine, 182P
- , lack of effect of ICI 55897 in rat, 523P
- Catalepsy, haloperidol-induced, effect of surgical destruction of corticostriatal projections and of kainic acid, 128P
- Cataleptic activity, of  $\Delta'$ -trans-tetrahydrocannabinol after oral administration to mice in relation to activity of cannabis herb and extracts, 401
- Catatonia, after morphine or D-Ala<sup>2</sup> methionine enkephalinamide administration, 156P
- Catecholamines, electrochemical measurement of concentration at tip of carbon fibre microelectrodes, 507P
- -- , exocytotic secretion from cat adrenal medulla by sodium deprivation: involvement of calcium influx mechanism, 305
- , kinin-induced discharge from adrenals, responsibility for hyperglycemic effect of lysophosphatidylserine, 108P
- -- , release in adrenal glands, involvement of sodium ion channels, 61
- , secretion from bovine isolated chromaffin cells, correlation with [3H]-ouabain binding to plasma membranes, 31
- Caudate nucleus, rabbit, effect of amphetamine on electrical stimulation-evoked release of [3H]-dopamine, 499P

- CCI 17810, effect on platelet aggregation and adhesiveness, 697
- Cefazedon, biliary excretion determined in vivo and in vitro, 185P
- Cefazolin, biliary excretion determined in vivo and in vitro, 185P
- Cell loss, from apices of intestinal villi, after exposure to polyethylene glycols, 557P
- Central nervous system, effect of N-acyl and N-sulphonyl derivatives of homotaurine, 163P
- -, opiate receptors, occupation by spiperone, 487P
- , rat, penetration by enkephalin analogues, measurement, 571P
- , rat and mouse, monitoring excitability following acute administration of high doses of benzodiazepines and the withdrawal of chronic administration of low doses of diazepam, 495P
- Central nervous system excitability, rebound decrease following a single dose of amphetamine in rat, 573P
- Cerebral arteries, innervation by non-adrenergic, noncholinergic nerves, 281
- Cerebral cortex, [125I]-hydroxybenzylpindolol labelling of 5-hydroxytryptamine recognition sites, 165P
- —, rat, mediation by  $\beta$ -adrenoceptor of noradrenaline-induced increased synthesis of prostaglandin  $E_2$  and  $F_{2\alpha}$ , 525P
- Cerebral glucose utilization, changes after development of picrotoxin-induced myoclonus in rat, 503P
- Cerebrospinal fluid, human, radioreceptor assay for γaminobutyric acid using [<sup>3</sup>H]-muscimol, 164P
- -- , rabbit, dopamine-β-hydroxylase activity after electroconvulsive shock, 567P
- -, rat, penetration by enkephalin analogues, 571P
- Ceruloplasmin, activity during carrageenan foot oedema 137P
- Chemical sympathectomy, effect on changes in adrenergic function caused by cadmium treatment in rat, 117P
- Chemoreceptor activity, comparison of the depressant effects of leucine- and methionine-enkephalin in cats, 544P
- Chemoreceptor trigger zone, effect of ablation on emetic responses to metenkephalin, morphine and naloxone in dog, 471
- Chlorbutol, inhibition of contractions in response to field stimulation, noradrenaline and dopamine, 101
- **Chlordiazepoxide**, behavioural effects, differences from chlorpromazine, 167P
- Chloride conductance, resting, of rat skeletal muscle fibres, after chronic application of (-)-emetine to the nerve, 112P
- **Chlorimipramine,** N-dealkylation *in vivo*: a single-dose kinetic study, 184P
- , plasma levels after single dose of chlorimipramine or chlorpromazine orally administered, 184P
- **Chlormadinone acetate,** antagonism of [<sup>3</sup>H]-ouabain specific binding to membranes, 31
- , catecholamine secretory effects in bovine isolated chromaffin cells, 31
- i-(5-Chloroacetylaminobenzfuran-2-yl)-2isopropylaminoethanol see Ro 03-7894
- (-)N-(2-chloroethyl)norapomorphine, differential antagonism of [<sup>3</sup>H]-N-*n*-propylnorapomorphine and [<sup>3</sup>H]-spiperone binding in rat striatum, 568P

INDEX

- p-Chloromethamphetamine, antagonism of hyperphagic response to insulin or 2-deoxy-(+)-glucose, 161P
- -, liberation of labelled amines in normal platelets, 349
- 2-m-(p-Chlorobenzoyl)phenyl-propionic acid see AH 7170 2-(4-p-chlorophenyl benzyloxy)-2-methyl propionic acid see ICI 55897
- 1-(3-Chlorophenyl)-3-[2-(3,3-dimethyl-1-azetidinyl) ethyl] see DL 308
- 2-hydroxybenzilidine-[ $\alpha$ (4-Chlorophenyl)5-fluoro, amino]-4-butanoate Na+ see SL 75 102
- Chlorothiazide, no hypertensive effect in DOCA/salt rats receiving propranolol, 509P
- Chlorpromazine, behavioural effects, differences from chlordiazepoxide, 167P
- -, effect on manual co-ordination in the marmoset, 494P
- -, effect on synthesis and release of dopamine from striatal synaptosomes in rat, 427
- -, inhibition of lymphocyte capping and transformation,
- -, inhibition of specific straital binding of [3H]-sulpiride, 129P
- -, N-dealkylation in vivo: a single-dose kinetic study,
- -, oral sedative potency in mice, 649
- Cholecystokinin-like peptides, effect on gastric emptying of a liquid meal in rat, 103P
- Cholic acid, effect on levels of 2,3,7,8-tetrachlorodibenzop-dioxin in liver 2 weeks after a single dose, 181P
- Choline, effect on rat gastric mucosal potential difference, 562P
- Cholinergic nerve terminals, acetylcholine release, role in anthopleurin-B-induced contractions in guinea-pig, 239
- Cholinesterase, effect of inhibition on depolarizations induced by muscarinic agonists in guinea-pig intestine, 319
- Cholinoceptor blockade, effect on cat and baboon urinary bladders in vitro and in vivo comparison, 176P
- Cholinoceptors, degradation in rat myotubes in vitro, 110P demonstration [3H]-3-quinu- muscarinic, by clidinylbenzilate binding, 109P
- -, 'muscarinic-sensitive', central and peripheral, comparison of stereospicificity of enantiomers of procylidine and tricyclamol, 277
- Cholinolytic activity, absence in binodaline, 573P
- effect of DL-308, thioridazine and atropine, 131P
- Chromaffin cells, bovine, secretion of catecholamines, correlation with [3H]-ouabain binding to plasma membranes, 31
- bovine, secretion of catecholamines induced by sodium deficient (sucrose) medium, calcium dependence,
- -, guinea-pig, activation of sodium ion channels by scorpion venom and grayanotoxin I, 61
- -, rat, storage and secretion of met-enkephalin-like materials, 146P
- Chronotropic responses, of guinea-pig isolated atrium to isoprenaline and orciprenaline, 635
- Chymotrypsin, reduction in lysophosphatidyl-serineinduced rise in brain and blood glucose, 108P
- Cimetidine, antagonism of effect of dimaprit and histamine on contractions, 171P

- -, antagonism of effects in rat uterus, 49
- -, antagonism of vasodepresor and gastric secretory responses to histamine in anaesthetized dog, 55
- blockade of histamine-induced thyrotrophin releasing hormone release from hypothalamic synaptosomes, 151P
- -, displacement of [3H]-cimetidine from guinea-pig heart preparation, 547P
- effect on [3H]-cimetidine binding and H<sub>2</sub> dependent adenylate cyclase activity in guinea-pig gastric mucosa,
- -, effect on development of indomethacin-induced gastric erosions in rat, 559P
- -, effect on erythema following intradermal injection of adenosine triphosphate in humans, 516P
- -, effect on gastric acid secretion, 49
- -, effect on histamine and bethanechol-induced contractions of guinea-pig, 49
- -, effects on some non-invasive indices of cardiac function, 131P
- -, inhibition of histamine-induced increase in lysosomal fragility of endothelial cells from human umbilical
- -, lack of effect on effects of caerulin or heptacholecystokinin on gastric emptying of liquid meal in rat, 103P
- , lack of effect on 5-hydroxytryptamine-induced venorelaxation, 233
- —, role in response of human lymphocytes, in vitro, 187P
- -, shifted dose-response curve to impromidine to right in isolated guinea-pig papillary muscle, 197
- [3H]-cimetidine, binding compared with the effects on H<sub>2</sub> dependent adenylcylase system in membranes from guinea-pig mucosa, 548P
- , binding to guinea-pig heart membranes, 547P
- -, effect on histamine-induced cyclic adenosine 3'5' monophosphate elevation in isolated rabbit gastric cell, 547P
- Cinanserin, 5-hydroxytryptamineeffect on tryptamine-induced core temperature changes in rat, 477
- -, effect on striatal [3H]-dopamine release and uptake in rat, 491P
- Cineole, effect on bile flow, bile composition and hepatic HMGR activity in rats, 104P
- Cinnarizine, antagonism of action of noradrenaline in rat aorta and mesenteric artery, 583P
- -, effect on calcium-induced contractions in potassium ion-depolarized smooth muscle, 144P
- Circling, amphetamine and apomorphine-induced, effect of electrolytic and kainic acid lesions, 492P
- -, dopamine-mediated, involvement of the periaqueductal grey, 492P
- -, induction by N-acyl and N-sulphonyl derivatives of homotaurine, 163P
- —, ipsiversive and contraversive, production by glutamate analogues in rat, 570P
- -, kainic acid-induced, effect of excitatory amino-acid antagonists in rat, 570P
- Citronellal, effect on bile flow, bile composition and hepatic HMGR activity in rat, 104P
- Clonazepam, effect on the intention tremor onset pressure and resting tremor onset pressure in mice, 502P

- **Clonidine**, effect on cardiovascular and behavioural response in rats, 580P
- , effect on coronary artery ligation evoked cardiac arrhythmias in spinal transected dogs, 192P
- -, effect on locomotor activity in rat, 580P
- , inhibitory effect on firing rate of locus coeruleus cells in rat, 498P
- responses in bisected rat vas deferens, effect of magnesium ion free Krebs solution, 564P
- [ $^3$ H]-clonidine, changes in binding to  $\alpha_2$ -adrenoceptors after short-term surgical denervation of rat submaxillary gland, 179P
- α-Clopenthixol, on specific striatal binding of [<sup>3</sup>H]-sulpiride, 129P
- **β-Clopenthixol,** inhibition of specific striatal binding of [<sup>3</sup>H]-sulpiride, 129P
- Cobalt, inhibition of catecholamine secretion from cat adrenal mudulla by sodium free medium, 305
- Cocaine, effect on the detection of electrical stimulation of medial forebrain bundle and on intensity gradient, 489P
- , effect on the effects of apomorphine, pergolide, dopamine and adrenaline on stimulation-evoked release of noradrenaline in rabbit hypothalamus, 497P
- , inhibition of noradrenaline uptake in rat and mouse vas deferens, 173P
- **Collagen,** induction of platelet aggregation, effect of CCI 17810 and aspirin, 697
- -- , induction of thrombocytopenia, effect of aspirin and CCI 17810 in mice, 697
- Collagen type II, induction of arthritis, effect of indomethacin and ICI 55897 in rats, 551P
- Compartmentation, anomalous, of 5-hydroxytryptamine in human intact platelets, 449
- Computerized venotest, for morphine addiction, 174P
- Concanavalin A, induction of histamine release in rat peritoneal mast cells, effect of lanthanide ions, 341
- Conjunctival naloxone test, for morphine addiction, 174P Contractile activity, induction in normal and denervated mouse neuromuscular junctions by *Anemonia sulcata* toxin II, 546P
- Contractile force, relationship with taurine levels and calcium levels in guinea-pig ventricular strips, 115P
- Contractile properties, of smooth muscle cells of guinea-pig mesenteric vessels, effect of vasopressin, oxytocin and noradrenaline, 673
- **Contractile response,** of rat aorta, to prostaglandins and prostaglandin analogues, effect of gender, 10
- Contraction frequency, histamine-induced in guinea-pig atrium, antagonism by ranitidine, 49
- **Contractions,** acetylcholine-induced, effect of atropine, binodaline and imipramine in guinea-pig ileum, 573P
- , acetylcholine-induced in rat uterus throughout pregnancy, effect of catecholamines, 530P
- , antigen-induced in tracheal spiral from sensitized guinea-pigs, effect of 5,8,11,14-eichostatetrayanoic acid or Ro3-1314, 689
- , calcium-induced, in potassium ion-depolarized smooth muscle, effect of calcium ion-antagonists, 144P
- , histamine-induced, effect of calcium withdrawal and verapamil in sensitized guinea-pig trachea smooth muscle, 175P

- , histamine-induced in tracheal spirals from sensitized guinea-pigs, effect of 5,8,11,14-eichosatetraynoic acid, 689
- , induced by noradrenaline, potassium or 5hydroxytryptamine, effect of bencyclan or nimodipine in rabbit isolated aortic strip or arterial rings, 582P
- , induced by noradrenaline or dopamine in stomach smooth muscle, effect of propranolol plus phentolamine or domperidone, 558P
- muscarine-elicited, of ileal lingitudinal muscle of guinea-pig, 225
- -, production in guinea-pig ileum by substance P, 504P
- Contractures, induction by suxamethonium or acetylcholine, effects of methohexitone in chick biventer cervicis muscle preparation, 111P
- potassium-induced in isolated rat vas deferens, 143P
- Constrictions, abdominal, acetic acid-induced, effect of subcutaneous and intracerebroventricular injection of calcitonin in mouse, 575P
- Copper, concentration during carrageenan foot oedema, 137P
- **Copper-deficient diet,** reduction of serum copper levels, 137P
- Core temperature, effect of 5-hydroxytryptamine or tryptamine injected into rat hypothalamus, 477
- Coronary artery ligation, production of CPK loss from heart in rat, 578P
- Coronary artery occlusion, production of myocardial thromboxane B<sub>2</sub> release and ventricular ectopic activity in dogs, effect of aspirin, 593
- Cortex, rat, electrical stimulation-evoked release of [<sup>3</sup>H]noradrenaline, effect of amphetamine, 499P
- Cortical ablation, effect on specific striatal binding of [<sup>3</sup>H]-sulpiride and [<sup>3</sup>H]-spiperone, 130P
- —, effect on [<sup>3</sup>H](-)-sulpiride and [<sup>3</sup>H]-spiperone binding to rat striatal membrane, 124P
- **Corticosterone,** effect of zimelidine on morphine elevated levels in rat plasma, 572P
- , plasma levels, effect of partial hepatectomy and reserpine in rats, 542P
- Corticostriatal (glutamergic) pathway, role in behavioural events connected with changes in dopaminergic transmission, 128P
- Corticostriatal pathways, location of dopamine-D<sub>2</sub> receptors in nerve terminals, 124P
- Corticostriatal projections, surgical destruction, effect on haloperidol-induced catalepsy, apomorphine-induced stereotypies and haloperidol-induced increases in homovanillic acid levels, 128P
- Cortisol, increase to on-going rate of discharge and response to automatically controlled periodic applications of noxious radiant heat to cutaneous receptive field, 157P
- Coryanthine, effect on neuronal and smooth muscle  $\alpha$ -adrenoceptors in rat vas deferens, 526P
- , effect on pressor response to adrenaline in the presence and absence of propranolol in rat, 519P
- , effect on vasoconstrictor responses to noradrenaline, phenylephrine and electrical stimulation, 120P
- Creatinine phosphokinase, coronary artery ligationinduced loss, reduction by creatinol O-phosphate, 578P
- Creatinol O-phosphate, ability to buffer between pH 6.8

- and pH 5.4, contribution to anti-ischaemic action,
- -, reduction of heart creatinine phosphokinase loss after coronary artery ligation in rat, 578P
- Cross-tolerance, between D-Ala2-methionineenkephalinamide and morphine on their action on motor behaviour and metabolism of dopamine and serotonin in some brain areas, 156P
- -, no development of, from dextrorphan to levorphanol, 245
- Crinia-angiotensin II, effect on drinking behaviour of rats and pigeons, 162P
- Crystal structure, of histamine H<sub>1</sub> receptor antagonists, 175P
- Cyclo(Leu-Gly), blockade of morphine-enhancement of hypothermic response to apomorphine in rat, 707
- -, effect on the tolerance to morphine-induced antinociception in the rat, 707
- Cyclo-oxygenase, inhibition, role in the effects of Ro3-1314 in sensitized guinea-pig lung fragments, 689
- Cycloheximide, effect on endogenous pyrogen fever in rabbit, 543P
- -, mode of action is not through inhibition of endogenous pyrogen synthesis in rabbit, 543P
- Cyclosporin-A, effect on [3H]-thymidine incorporation into human blood mononuclear cells stimulated by phytohaemagglutinin, pokeweed mitogen phorbol-12-myristate-13-acetate, 588P
- Cyproheptadine, effect on 5-hydroxytryptamine- and tryptamine-induced changes in core temperature in rat,
- L-Cysteate, mimics the action of L-aspartate on lobster muscle, 113P

D

## D600 see Methoxyverapamil

- Dantrolene sodium, action on rat fast and slow muscle in vivo, 665
- , effect on transmitter release in rat atrium, 191P
- De-efferented muscle spindles, effect of pentetrazol on discharge frequency, 75
- 11-Deoxy-13,14-dihydro-16S-methyl-prostaglandin see K11550
- [14C]-deoxyglucose, administered after development of picrotoxin-induced myoclonus, shows changes of cerebral glucose utilization in rat, 503P
- Depolarizations, induction in smooth muscle from teania of guinea-pig caecum by iontophoretic application of muscarinic agonists, 319
- **Depression,** effect on high affinity binding of [<sup>3</sup>H]imipramine to human platelets, 152P
- Dermatan sulphates, mode of anticoagulant activity, 81
- -, on plasma thrombin times, 81
- Desensitization, effect of SL 75 102 or γ-aminobutric acid in dorsal root ganglionic neurones, 355
- Desipramine, decrease in maximal binding of [3H]imipramine in rat cortex, 152P
- -, effect on [3H]-imipramine binding in cat brain and platelets, 154P
- -, inhibitory effect on firing rate of locus coeruleus cells in rat, 498P

- Desmethylchlorimipramine, plasma levels after single oral dose of chlorimipramine or chlorpromazine, 184P
- Detrusor strips, cat and baboon, effect of hyoscine on response to transmural stimulation, 176P
- **Dexamethasone**, effect on [<sup>3</sup>H]-thymidine incorporation into human blood mononuclear cells stimulated by phytohaemagglutinin, pokeweed mitogen phorbol-12-mysistate-13-acetate, 588P
- —, inhibition of carrageenan paw oedema, requires de novo synthesis of putrescine, 182P
- [3H]-dexetimide, specific binding to dopamine receptors, effect of continuous administration of trifluoperazine in rat brain, 569P
- Dextran, induction of histamine release in rat peritoneal mast cells, effect of lanthanide ions, 341
- **Dextrorphan,** production of tolerance, 245
- Diabetes, streptozotocin-induced, effect on glucuronyl transferase activity in rat, 539P
- **Diaminobutyric acid,** potentiation of  $\gamma$ -aminobutyric acid inhibition of field -stimulation of guinea-pig vas deferens, 142P
- Diaphragm, rat, effect of agents which alter calcium metabolism on acetylcholine turnover, 461
- Diastolic blood pressure, response to noradrenaline, effect of effect of rauwolscine and prazosin, 123P
- Diazepam, acute administration of high doses and chronic administration of low doses leads to withdrawal hyperexcitability of central nervous system, 495P
- -, effect on manual co-ordination in the marmoset, 494P
- -, effect on the intention tremor onset pressure and resting tremor onset pressure in mice, 502P
- N-Diazoacetylglycine amide, induction of damage to DNA, evaluation by oscillating viscometer, 186P
- Diazoxide, effects on methoxamine and barium-induced rhythmic contractions of rat vas deferens, 563P
- carbon fibre microelectrodes, for trophysiological and electrochemical studies, 507P
- Diflunisal, effect on energy metabolism in mitochondria isolated from rat liver, 552P
- —, effect on platelet and gastric prostaglandin-synthetase in humans, 141P
- α-Difluoromethylornithine, inhibition of dexamethasone effects on carrageenan paw oedema, 182P
- Digitalis sulphonate derivatives, of different lipophilicity, active site-directed alkylation of sodium-potassium dependent adenosine triphosphatase, 25
- Digitoxigenin-3-tosylate acetate, site directed alkylation of sodium-potassium dependent adenosine triphosphat-
- [3H]-dihydroalprenolol, binding in crude membrane fractions of parotid gland, effect of parasympathectomy in rat, 534P
- -, specific binding, effect of chronic treatment of imipramine, 154P
- Dihydroxyphenylacetic acid, in areas of brain, after morphine or D-Ala2 methionine enkephalinamide administration, 156P
- L-Dihydroxyphenylalanine, effect on the intention tremor onset pressure and resting tremor onset pressure in mice, 502P
- 5,7-Dihydroxytryptamine, intracisternal administration, effect on acute anti-hypertensive action of propranolol in sino-aortic denervated anaesthetized dog, 411

- , intrahypothalamic pretreatment, inhibition of tryptamine-induced hyperthermia, lack of effect on 5-hydroxytryptamine-induced hypothermia in rats, 477
- **Diltiazem,** effect on calcium-induced contractions in potassium ion depolarized smooth muscle, 144P
- , effects on rabbit isolated heart perfused with oxygenated or hypoxic solution, 190P
- Dimaprit, effect on [3H]-cimetidine binding and H<sub>2</sub> dependent adenylate cyclase in guinea-pig gastric mucosa, 548P
- , effect on lysosomal fragility of endothelial cells from human umbilical veins, 603
- , reduction of acetylcholine and phenylephrine contractions 171P
- , stimulation of histamine-induced release from median eminence synaptosmones of thyrotrophin releasing hormone, 151P
- N,N-dimethyl-2-amino-6,7-dihydroxy-1,2,3,4-tetrahydronaphthalene, cardioinhibitory responses, effect of prazosin and BE 2254 in pithed rats, 586P
- (-)-(R,5R,9R,2"S)-5,9-dimethyl-2-hydroxy-tetrahydrofurfuryl-6,7-benzomorphan see MR 2034
- **Dimethyl sulphate,** induction of damage to DNA, evaluation by oscillating viscometer, 186P
- p-(3,3-Dimethyl-1-triazeno)benzoic acid, antileukaemic action, 107P
- 4-(3,3-Dimethyl-1-triazeno)imidazole-5-carboxamide, antileukaemic action, 107P
- **Dimethylnitrosamine,** induction of damage to DNA, evaluation by oscillating viscometer, 186P
- Dimethyltriazenes, mechanism of antileukaemic action in mice, 107P
- **Dinitrophenol,** effect on acetylcholine release and tissue content in rat diaphragm preparations, 461
- **2,4-Dinitrophenol,** effect on rate of incorporation of [\begin{align\*} 1^4C\]serine into phospholipid in guinea-pig ileum, 397
- **Diphenylhydramine,** effect on erythema following intradermal injection of adenosine triphosphate in humans, 516P
- **Dipyridamole,** effect on balance between prostacyclin and thromboxane in human serum, 299
- , plus acetylsalicylic acid, effect on the balance between prostacyclin and thromboxane in human serum, 299
- , potentiation of inotropic effects of adenosine in guinea-pig atrium, 587P
- **Disodium cromoglycate,** effect on mast cell calcium activated adenosine triphosphatase from rat peritoneum, 549P
- Dithiothreitol, effect of pretreatment on the effects of acetylcholine antagonists on anticholinesterase-induced twitch potentiation in the rat isolated diaphragm, 545P
- **DL-308,** comparison of anticholinergic activities with thioridazine and atropine, 131P
- **DNA**, cellular and viral synthesis, effect of TX 3047 in vitro, 597
- , damaging effects of hydrazine monoamine oxidase inhibitors, 145P
- —, evaluation of damage induced by mutagens and carcinogens, using a sensitive oscillating viscometer, 186P
- **Domoic acid,** production of dose-related circling and seizures in rat, 570P

- **Domperidone**, effect on relaxation response of stomach smooth muscle to phenylephrine, noradrenaline and dopamine, 558P
- **Dopamine,** administered to nucleus mesencephalicus profundus, production of ipsilateral head-neck deviation and stereotyped head-neck movements, 124P
- , detection by carbon fibre micro-electrodes in vitro, 507P
- , effect on concentrations of guanosine 3',5'monophosphate in amygdala of kindled rats, 500P
- , effect on dopamine synthesis in striatal synaptosomes, 127P
- , effect on renal blood flow and renal vascular resistance in guinea-pig, 507P
- , effect on stimulation-evoked release of noradrenaline in the rabbit hypothalamus, in the presence of cocaine, 497P
- —, effect on thermoregulation in restrained mice, 566P
- , enhanced metabolism, after morphine or D-Ala<sup>2</sup> methionine enkephalinamide administration, 156P
- -, induction of contractions, inhibition by chlorbutol, 101
- , influence on cyclic guanosine 3',5' monophosphate concentrations in tissue slices from dopamine supersensitive striata, 495P
- , inhibition of specific striatal binding of [<sup>3</sup>H]-sulpiride, 129P
- , inhibition of transmurally-stimulated gastric fundus of the rat, 537P
- , mediation of circling behaviour, involvement of the periaqueductal grey, 492P
- metabolism, effect of tolerance and cross tolerance between D-Ala<sup>2</sup> methionine enkephalinamide and morphine, 156P
- —, release of thyrotrophin releasing hormone from hypothalamic synaptosomes, 151P
- , spontaneous and drug-evoked release from presynaptic nerve endings of the tuberoinfundibular system, 160P
- -- , synthesis, controlled by dopamine reuptake feedback mechanism, 127P
- , synthesis and release from rat striatal synaptosomes, effect of neuroleptic drugs, 427
- , uptake and deamination in isolated perfused rat lung and lung homogenates, 731
- -- , varying doses produce contraction and relaxation of stomach smooth muscle strips, 558P
- [3H]-dopamine, electrical stimulation-evoked release from rabbit caudate nucleus, effect of amphetamine, 499P
- —, liberation from platelets with or without reserpine, 349
- , release from rat striatal slices and inhibition of uptake into striatal synaptosomes, effect of 5hydroxytryptamine agonists and antagonists, 491P
- , uptake and release from a crude striatal synaptosome preparation, effect of pentobarbitone, amphetamine and benztropine, 126P

Dopamine agonists, binding sites in rat striatum, 568P
Dopamine antagonists, binding sites in rat striatum, 568P
Dopamine-β-hydroxylase, effect of single and repeated electroconvulsive shock in cerebrospinal fluid and serum of rabbits, 567P

 , secretion from cat adrenal medulla, effect of perfusion with calcium free medium, 305 **Dopamine-like inhibitory receptors,** presynaptic, location on noradrenergic nerve endings of the rabbit hypothalamus, 497P

**Dopamine nerve terminals,** location of inhibitory 5-hydroxytryptamine receptors in rat striatum, 491P

**Dopamine receptor agonists,** effect on renal blood flow and renal vascular resistance in guinea-pig, 507P

 , inhibition of specific striatal binding of [<sup>3</sup>H]-sulpiride, 129P

**Dopamine receptors,** alteration of characteristics by continuous trifluoperazine administration for 6 months in rat brain, 569P

- , effect of melanotrophin release inhibiting factor and cyclo(Leu-Gly) on sensitivity in rat, 707
- —, striatal, occupation by spiperone, 487P
- , striatal, postsynaptic, specific binding of [<sup>3</sup>H]spiperone binding, in 31-day-old hypo- and hyperthyroid rats, 125P

**Dopamine-D<sub>2</sub> receptors,** characterization and localization, 124P

 , location on terminals of cortico-striatal glutamate fibres, 130P

**Dopamine-stimulated adenylate cyclase,** abolition of activity by kainate-induced lesions, 124P

**Dopaminergic mechanisms,** activation, induction of stereotyped behaviour, 124P

**Dopaminergic supersensitivity,** in relation to *in vitro* striatal accumulation of cyclic guanosine 3',5' monophosphate in response to dopamine, depolarization and calcium ions, 495P

**Dopaminergic transmission,** role of corticostriatal (glutamergic) pathway, 128P

**Dorsal horn neurones,** dorsal root evoked and chemicallyevoked responses, effect of baclofen, 373

**Dorsal root ganglion neurones,** rat, comparison of activity of SL 75 102 and γ-aminobutyric acid, 355

**Doxantrazole,** effect on erythema following intradermal injection of adenosine triphosphate in humans, 516P **Drinking,** effect of fenfluramine in rat, 621

**Drinking behaviour,** effect of crinia-angiotensin II in rats and pigeons, 162P

**Dysprosium,** effect on histamine release from rat peritoneal mast cells, 341

**Duodenum,** chicken, duckling and turkey, monoamine oxidase inhibition by furazolidone, 555P

**Dyes,** clinically used, effect on prostaglandin  $E_2$  inactivation in rat and human lung, 715

E

EGTA, prevention of potassium-induced thyrotrophin releasing hormone from hypothalamus, 151P

Eicosatetraynoic acid, inhibition of angiotensin II-induced contractions of isolated artery and binding to particulate fraction, 247

- -- , reduction of inhibition of myometrial prostacyclin formation by lipoxygenase products, 138P
- 5,8,11,14-Eicosatetraynoic acid, effect on antigen-induced contractions of tracheal spiral from sensitized guineapigs, in presence of indomethacin, 689
- Egg lecithin, effect on elimination of fat emulsions, measurement by gamma scintigraphy, 180P

Electrical stimulation, detection in medial forebrain bundle

- at level of lateral hypothalamus, effect of haloperidol and cocaine, 489P
- , effect of indapamide on responses of in vitro preparations from rat, 172P
- , effect on high affinity choline uptake in guinea-pig brain slice, 148P
- , induction of [<sup>3</sup>H]-dopamine release from rabbit caudate nucleus, effect of amphetamine, 499P
- , induction of noradrenaline release from hypothalamus, effect of apormorphine and pergolide, 497P
- , induction of release of [<sup>3</sup>H]-noradrenaline from rat cortex and rabbit hypothalamus, effect of amphetamine, 499P
- , of cat and baboon bladder and bladder strips, effect of hyoscine on responses, 176P
- , of guinea-pig ileum, suppression by adrenaline, noradrenaline and ephedrine; partial inhibition by phenylephrine and isoprenaline, 201
- -, of immature rat vas deferens, 527P
- -- , vasoconstrictor responses of rabbit hind limb, effect of rauwolscine and coryanthine, 120P

**Electroconvulsive shock**, effect on dopamine  $\beta$ -hydroxylase activity in cerebrospinal fluid and serum of rabbits, 567P

 , induction of retrograde amnesia of passive avoidance conditioning, protection by neurotoxic lesion of median raphe nucleus, 169P

Electrocorticogram, effect of cimetidine or ranitidine, 131P Electrocorticographic activity, low voltage high frequency, after amphetamine administration to anaesthetized rats with dura removed, 149P

**Electrogenic sodium pump,** location on serosal side of membrane in rat gastric mucosa, 562P

**Electrolytic lesions**, of left periaqueductal grey, abolition of apomorphine-induced circling, 492P

 , of nucleus reticularis gigantocellularis, effect of apomorphine- and (+)-amphetamine-induced circling, 492P

Eledoisin, effect on gastric emptying of conscious rat, 221

(-)-Emetine, effects on rat skeletal muscle fibres after chronic application to the nerve, 112P

**Emulsifiers,** effect on the elimination of intravenouslyadministered fat emulsions measured by gamma scintigraphy, 180P

**Endogenous pyrogen fever,** effect of cycloheximide in rabbits, 543P

**β-Endorphin,** brain and pituitary concentrations, effect of hyperprolactinemia, 167P

 , potency in guinea-pig ileum, mouse vas deferens and rat vas deferens, 13

**Endorphin stores,** possible dopaminergic control in intermediate posterior lobe of pituitary, 155P

Endothelium, removal from canine isolated femoral arteries, effect on reactivity to adenine nucleotides and acetylcholine, 510P

Endplate currents, shortened duration by polymyxin B, 41 Endplate potentials, after polymyxin B, 41

**Enkephalin,** D-Ala-D-Leu-, effect on hepatic lidocaine metabolism in male rat, 553P

- , D-Ala<sup>2</sup>-D-Leu<sup>5</sup>-, comparative potency in guinea-pig ileum, mouse and rat vas deferens, 13
- , D-Ala<sup>2</sup>-Leu-, responses in bisected rat vas deferens, effect of magnesium ion free Krebs solution, 564P
- —, D-Ala<sup>2</sup>-Met-, tolerance development, comparison with

- morphine, morphine tolerance development in two strains of rat, 166P
- , leu-, depressant effects on spontaneous chemoreceptor activity in cats, 544P
- Met-, comparative potency in guinea-pig ileum, mouse and rat vas deferens, 13
- , Met-, depressant effects on spontaneous chemoreceptor activity in cats, 544P
- , Met-, emetic action following administration into cerebralvetricles of dogs, 471
- Met-, -like materials, effect of reserpine on concentrations in rat adrenal gland, 146P

**Enkephalin analogues,** method for determining the cerebrospinal fluid penetration in rat, 571P

**Enkephalin receptors,** location in emetic chemoreceptor trigger zone of the dog, 471

Enkephalinamide, D-Ala<sup>2</sup>-Met-, tolerance- and cross tolerance with morphine, effect on their action on motor behaviour and dopamine and 5-hydroxytryptamine metabolism in areas of brain, 156P

Enteropooling activity, production by K11550, 178P

Ephedrine, action in guinea-pig ileum, 201

**Epilepsy**, amygdaloid kindled, effect of anti-grand mal drugs in rat, 501P

2 Br- $\alpha$ -ergocriptine, and sulpiride, effect on opioid activity in rat pituitary, 155P

— , effect on opioid activity in rat pituitary, 155P

**Ergotamine**, increase of (±) baclofen analgesia, lack of effect on opioid analgesia, 156P

Erythrocyte sedimentation rate, lowering by ICI 55897 in treatment of arthritis, 523P

**Erythrocytes,** human, inhibition by lithium of glycolysis, 576P

Ethanol, effect on motor and inhibitory responses of anococcygeus and bovine retractor penis muscles, 528P

**Ethanolamine-O-sulphate,** effect on hypothalamic γ-aminobutyric acid concentrations and prolactin in plama, 150P

Ethosuximide, effect on intention tremor onset pressure and resting tremor onset pressure in mice, 502P

N-ethyl-2-pyrrolidylmethylcyclopentylphenylglycollate, effect on paraoxon-induced twitch potentiation in untreated and dithiothreitol treated rat diaphragm, 545P

Ethylacetate, effect on bile flow, bile composition and hepatic HMGR activity in rats, 104P

5'-N-ethylcarboxamidoadenosine, inhibition of human platelet aggregation, 443

**Ethylketazocine,** agonist in guinea-pig ileum and mouse vas deferens, 13

-, antagonist in rat vas deferens, 13

Etorphine, comparative potency in guinea-pig ileum, mouse vas deferens and rat vas deferens, 13

[3H]-etorphine, opiate receptor binding in guinea-pig and rat small intestine, 147P

**Excitation-secretion coupling,** interference by D600 in rat atria, 191P

Exploratory behaviour, effect of (+)- amphetamine or translcypromine plus L-tryptophan on, in spontaneously hypertensive rats, 579P

Extensor digitorum longus muscle, rat, action of dantrolene sodium in vivo. 665

Extrinsic stimulation, effect on laryngeal nerve in guineapig, 554P F

Fat emulsions, measurement of effects of emulsifiers on elimination, by gamma scintigraphy, 180P

**Febrile response,** to endogenous pyrogen, suppression by cycloheximide in rabbits, 543P

Feeding, effect of fenfluramine in rat, 621

'Feminizing factor', pituitary gland, maintenance of femaletype metabolism in rat liver, 553P

**Fendiline,** effect on calcium-induced contractions in potassium ion-depolarized smooth muscle, 144P

**Fenfluramine,** antagonism of hyperphagic response to insulin or 2-deoxy-*d*-glucose, 161P

 , effect on microstructure of feeding and drinking in the rat, 621

Fenoterol, inhibition of secretion of gastric acid in Shay rats, 177P

Fever, endogenous pyrogen-induced, effect of cycloheximide in rabbits, 543P

Field stimulation, contractile response of cervical trachea in

guinea-pig, 554P

—, induction of contractions, inhibition by chlorobutol,

- 101

  —, of guinea-pig vas deferens, effect of neuronal γ-
- —, or guinea-pig vas deferens, effect of neuronal γaminobutyric acid uptake inhibitors on γ-aminobutyric acid inhibition, 142P
- , of inhibitory nerves, effect of ethanol in anococcygeus and bovine retractor penis muscle, 528P
- , to rat anococcygeus muscle, effect on ethanol on motor response, 528P

Finger tremor, effects of oral propranolol and atenolol, 134P

—, method for assessing the effect of β-adrenoceptor blockers, 133P
 FK 33-824, penetration of cerebrospinal fluid in rat, 571P

Flunarizine, antagonism of action of noradrenaline in rat aorta and mesenteric artery, 583P

- , effect on methoxamine and barium-induced rhythmic contractions of rat vas deferens, 563P
- —, identification of specific binding sites in rat aorta, 517P
   α-Flupenthixol, blockade of dopamine-induced thyrot-

rophin releasing hormone release from hypothalamic synaptosomes, 151P

- —, effect on potassium-induced increase in [14C]dopamine release and on γ-aminobutyric acid from rat striatal synaptosomes, 427
- , effect on synthesis and release of dopamine from striatal synaptosomes in rat, 427
- , inhibition of specific striatal binding of [<sup>3</sup>H]-sulpiride, 129P

β-Flupenthixol, inhibition of specific striatal binding of [<sup>3</sup>H]-sulpiride, 129P

 , no blockade of dopamine-induced thyrotrophin releasing hormone release from hypothalamic synaptosomes, 151P

Fluphenazine, effect on synthesis and release of dopamine from rat striatal synaptosomes, 427

, inhibition of [<sup>3</sup>H]-sulpiride binding in rat striatal membranes, 129P

Follicle-stimulating hormone, effect on hepatic imipramine metabolism in male rat, 553P

Foot swelling, inhibition by indomethacin or ICI 55897 in rat, 551P

Forepaw myoclonus, development after intrastriatal pic-

rotoxin administration coupled with concurrent damage to the overlying sensorimotor cortex in rats, 503P

Free fatty acid, effect of age on noradrenaline or theophylline stimulated release of, 106P

Frequency-contractile force, of left atria, effect of ouabain, age related changes, 263

Frusemide, plus amiloride, reduction of urinary magnesium excretion in conscious saline-loaded rats, 285

Funarizine, effect on calcium-induced contractions in potassium ion-depolarized smooth muscle, 144P

Fundic mucosa, rabbit isolated, gastric acid secretion, 560P
Fundus, rat, transmurally-stimulated, dopamine inhibition of, 537P

Furazolidone, actions in poultry, 555P

FW 33-569, penetration of cerebrospinal fluid in rats, 571P

G

Gallstones, terpene therapy, 104P

Gamma scinigraphy, measurement of effects of emulsifiers on elimination of intravenously-administered fat emulsions. 180P

Ganglionic presynaptic structures, 4-aminopyridine induction of action potentials leading to acetylcholine release. 159P

**Gastric acid,** inhibition of secretion by  $\beta_2$ -adrenoceptor agonists in Shay rats, 177P

- , inhibition of secretion by cimetidine and atropine in rat, 559P
- , inhibition of secretion by ranitidine, 49
- , inhibition of secretion by ranitidine and cimetidine in anaesthetized dog, 55
- , secretion, action of prostaglandin E<sub>2</sub> and prostacyclin analogues against different secretagogues in perfused rat and mouse whole-stomachs, 291
- -, secretion in rabbit isolated fundic mucosa, 560P

Gastric cells, rabbit, histamine elevated cyclic adenosine 3'5' monophosphate, inhibition by cimetidine and ranitidine, 547P

Gastric circulation, role of endogenous prostaglandins in regulation, 139P

Gastric emptying, effect of substance P and its natural analogues, in conscious rats, 221

 , of a liquid meal in rat, effect of cholecystokinin-like peptides, 103P

Gastric erosions, induction by indomethacin in rats, comparison of antierosive action of calcitonin with that of drugs reducing gastric acidity in rat, 559P

Gastric intraluminal pressure, effect of antigen, histamine or anaphylaxis in isolated stomachs, 536P

Gastric juices, comparative effects of aspirin and diflunisal on prostaglandin synthetase, 141P

Gastric lesions, stress induced, inhibition by K11550, potency, 178P

Gastric mucosa, guinea-pig, comparison of [3H]-cimetidine binding to the effects on H<sub>2</sub> dependent adenylate cyclase system, 548P

 , rat isolated, pentagastrin-induced increase of histidine decarboxylase activity in isolated gastric mucosa of rat, 561P

Gastric secretory responses, to histamine, antagonism by

histamine H<sub>2</sub>-receptor antagonists in anaesthetized dog, 55

Gastro-intestinal ulceration, no induction by ICI 55897 in rat, 523P

**Gender differences,** effect on responses of prostaglandin receptors of rat aorta, 10

 , in hepatic microsomal metabolism of lidocaine and imipramine in rat, 553P

Glucocorticosteroids, effect on [<sup>3</sup>H]-thymidine incorporation into human blood mononuclear cells stimulated by phytoheamagglutinin, pokeweed mitogen and phorbol-12-myrisatate-13-acetate, 588P

Glucose, accumulation in brain after administration of phosphatidylserine, 108P

- , cerebral utilization, changes after development of picrotoxin-induced myoclonus in rat, 503P
- , brain and blood levels, chymotrypsin reduction in rise after lysophosphatidylserine, 108P
- , effect of lithium on utilization in human erythrocytes, 576P

Glucuronyl transferase, activity, effect of streptozotocininduced diabetes in rat, 539P

Glutamate, enhancement of actions of L-cysteate and L-aspartate on lobster muscle, 113P

L-Glutamate, responses of spinal cord neurones, effect of baclofen, 373

Glutamic acid dimethylester, effect on kainic acid-induced circling in rat, 570P

γ-**D-Glutamylglycine**, effect on kainic acid-induced circling in rat, 570P

Glutamine, efflux from rat cerebral cortex, effect of potassium chloride, 149

Glycerol, theophylline stimulated release of, inhibition by nicotinic acid, in adipose tissue from adult rats, 106P

**Glycine**, effect on monosynaptic excitatory responses of cat spinal cord neurones, 373

, inhibition of vasopressin release in response to carotid occlusion, 17

**Glycogen stores,** prevention of depletion by diltiazem in rabbit isolated heart, 190P

Glycolysis, inhibition by lithium in human erythrocytes, 576P

Glycoprotein, inhibition of arthritis-induced rise in levels in serum by indomethacin and ICI 55897 in rat, 551P

Glycosaminoglycans, heparin content, on the effect of antiserum specific for antithrombin III on anticoagulant activity of dermatan sulphates, 81

**Granular pool,** platelet, location of [<sup>14</sup>C]-5-hydroxytryptamine, [<sup>3</sup>H]-dopamine and [<sup>3</sup>H]-noradrenaline, 349

**Grayanotoxin I,** effect on catecholamine secretion in adrenal gland of guinea-pig, 61

Growth hormone, effect of apomorphine and muscimol on stimulation of release, in rats with kainic lesions, 151P

 , effect on hepatic lidocaine metabolism in male rat, 553P

Guanabenz, effect on cardiovascular and behavioural responses in rats, 580P

**Guanethedine**, abolition of anthopleurin-B-induced relaxation of ileum in guinea-pig, 239

- , abolition of nicotine-induced relaxation of guinea-pig trachealis muscle, 530P
- -, abolition of relaxant responses to extrinsic nerve stimu-

- lation and field stimulation in guinea-pig, 554P
- —, augmented initial phasic part of 5-hydroxytryptamine response, 170P
- , effect of pretreatment with, on phentolamine effects on phasic and tonic components of potassium contractures in rat isolated vas deferens, 143P
- Guanidine, effect on acetylcholine release and tissue content in rat diaphragm preparations, 461
- Guanosine 3',5' monophosphate, cyclic, effect of kindling on concentrations in amygdala in rat, 500P
- , cyclic, striatal accumulation in response to dopamine, depolarization and calcium ions, in relation to dopaminergic supersensitivity in rat, 495P
- **Gut microflora,** involvement in absorption process of oestrone sulphate in rat, 541P

## H

- HA 966, pretreatment, effect on kainic acid-induced circling in rat, 570P
- **Haemolysis,** of human blood, production by sea anemone (*Tealia felina*) toxin, 211
- Haloalkylamines, an in vitro comparison of activity upon rat anococcygeus and guinea-pig trachealis, 531P
- Haloperidol, effect of, on amphetamine inhibition of stimulation-evoked release of [3H]-dopamine, 499P
- , effect on concentrations of guanosine 3',5' monophosphate in amygdala of kindled rats, 500P
- , effect on 5-hydroxytryptamine- and tryptamineinduced changes in core temperature in rats, 4777
- , effect on hypotensive responses to bromocriptine in spontaneously hypertensive rats, 419
- , effect on potassium-induced increase in [14C]dopamine release in rat striatal synaptosomes, 427
- , effect on synthesis and release of dopamine from striatal synaptosomes in rat, 427
- , effect on the detection of electrical stimulation of medial forebrain bundle and on intensity gradient, 489P
- —, induction of catalepsy, effect of kainic acid, 128P
- , induction of catalepsy, effect of surgical destruction of corticostriatal projections, 128P
- —, induction of increase in homovanillic acid, effect of surgical destruction of corticostriatal projections, 128P
- inhibition of specific striatal binding of [<sup>3</sup>H]-sulpiride, 129P
- , prevention of apomorphine-induced vocalization, 124P
- , prevention of stereotyped behaviour produced by dopamine and apomorphine, 124P
- **Halothane**, effect of amphetamine and bemegride on sensitivity in rats, 573P
- , effect on incorporation of [14C]-serine into phospholipid in guinea-pig ileeum, 397
- , effect on sensitivity to, of administration of benzodiazepines in rats and mice, 495P
- , gas chromatographic assay for concentration in an aqueous medium, 397
- Head-neck deviation, after administration of dopamine or apomorphine to nucleus mesencephalicus profundus, 124P
- Heart, chicken, duckling and turkey, monoamine oxidase inhibition by furazolidone, 555P

- , dog, aspirin inhibition of myocardial release of thromboxane B<sub>2</sub> and ventricular ectopic activity following acute coronary artery occlusion, 593
- , guinea-pig, inhibitory potency of digitalis sulphonate derivatives on microsomal adenosine triphosphatase preparation, 25
- , guinea-pig, interaction of potassium with the two ouabain specific binding sites on microsomes, 513P
- , guinea-pig, radioligand studies using [<sup>3</sup>H]-cimitidine and [<sup>3</sup>H]-ranitidine binding to membrane, 547P
- , rabbit, increase in blood flow by intravenous administration of HWA 285, 723
- , rabbit isolated, prevention of glycogen depletion and protection against hypoxia-induced structural damage by diltiazem, 190P
- Heart performance, effect of HWA 285 in dogs and rabbits, 723
- **Heart rate**, after sinoaortic denervation, effect of captopril, 645
- , dose-related reductions by adrenaline in conscious dogs, 520P
- , effect of centrally administered 6-hydroxydopamine during muscle ischaemia in unaesthetized rat, 508P
- -, effect of cimetidine or ranitidine, 131P
- -, effect of clonidine and guanabenz in rat, 580P
- -, effect of HWA 285 in dogs and rabbits, 723
- , effect of morphine on vagally-stimulated changes in rat, effect of morphine tolerance, 584P
- , effect of sulphinpyrazone in open-chested anaesthetized dogs, 5
- , lack of effect of inhibitory extract from bovine penis muscle in rat, 365
- -, reflex changes, role of acetylcholine 170P
- , reduction of heart rate without reduction of pumping ability of heart, 114P

## Heart rate see also Bradycardia and Tachycardia

- Hemicholinium-3, caused a rightward shift of doseresponse curve to muscarine on ileal longitudinal muscle of guinea-pig, 225
- -, effect on reflex changes in heart rate, 170P
- Heparin, content of dermatan sulphate preparation, effect on effect of antiserum specific for antithrombin III on anticoagulant activity, 81
- Hepatic alkaline phosphatase, induction by adrenaline, involvement, of  $\beta_2$ -adrenoceptors in mice in vivo, 8
- **Hepta-cholecystokinin**, effect on gastric emptying of a liquid meal in rat, 103P
- Herpes simplex virus type 1, inactivation by TX 3047 in vitro, 597
- Hexamethonium, abolition of γ-aminobutyric acid-induced action potentials and ESPS, 159P
- , abolition of contractile response to extrinsic nerve stimulation in guinea-pig, 554P
- , abolition of nicotine-induced relaxations of monkey arterial strip, 281
- , abolition of spontaneous excitatory postsynaptic potentials and action potentials, induced by 4-aminopyridine, 159P
- , antagonism of acetylcholine-evoked catecholamine secretion from bovine isolated chromaffin cells, 31
- , antagonism of nicotine-induced relaxation of trachealis muscle in guinea-pig, 530P
- —, effect on paraoxon-induced twitch potentiation in un-

- treated and dithiothreitol treated rat diaphragms, 545P
- , plus atropine, reduction of grayanotoxin I increased catecholamine output, 61
- --- , plus atropine, reduction of scorpion venom increase in catecholamine output, 61
- Hexyl trimethylammonium, action on membrane potential, potassium efflux, and contraction of longitudinal muscle of guinea-pig intestine, 319
- **5-Hexyne-1, 4-diamine,** reversal of dexamethasone effects on carregeenan paw oedema, 182P
- High affinity choline uptake, effects of electrical stimulation, high potassium concentrations, atropine and physostigmine in guinea-pig brain slices, 148P
- High molecular weight Met-enkephalin-like material, effect of reserpine on concentrations in rat adrenal gland, 146P
- High pressure neurological syndrome, effect of some anticonvulsant, sedative and anti-Parkinsonian drugs in mice, 502P
- **Hind limb perfusion pressure,** response to noradrenaline, effect of rauwolscine and prazosin, 123P
- **Hindquarters**, rat perfused, dilatation of resistance vessels by inhibitory extract from bovine retractor penis muscle, 365
- Histamine, bronchospasmogenic activity, in relation to thromboxane A<sub>2</sub> formation, 140P
- , effect of lanthanide ions on release from rat peritoneal mast cells, 341
- , effect on [<sup>3</sup>H]-cimetidine binding and H<sub>2</sub> dependent adenylate cyclase in guinea-pig gastric mucosa, 548P
- effect on guinea-pig central and peripheral airways smooth muscle in vitro, 533P
- , effect on lysosomal fragility of endothelial cells from human umbilical veins, 603
- , induction of concentration-dependent contractile response of goat isolated pulmonary arteries, 233
- , induction of contractions, inhibition by sea anemone (Tealia felina) toxin, 211
- , induction of contractions, sources of calcium in sensitized guinea-pig trachea, 175p
- , induction of contractions in guinea-pig ileum, lack of effect of ranitidine, 49
- , induction of contractions in tracheal spiral from sensitized guinea-pig, effect of 5,8,11,14-eicosatetraynoic acid, 689
- , induction of dose-dependent contractile responses of goat isolated pulmonary veins, 233
- , induction of increased gastric acid output, effect of prostaglandin E<sub>2</sub> and stable prostacyclin analogues, 291
- , induction of gastric acid secretion, inhibition by ranitidine, 49
- , induction of tachphylaxis to subsequent treatment by adenosine triphosphate in humans, 516P
- , lysophosphatidylserine-promoted release from isolated mast cells, 108P
- , partial mediation of motility patterns produced by anaphylaxis in guinea-pig stomach, 536P
- production of concentration-related increases in gastric acid secretion in rabbit isolated fundic mucosa, 560P
- , reduction of acetylcholine and phenylephrine contractions, 171P

- , release of thyrotrophin releasing hormone from hypothalamic synaptosomes, 151P
- , releasing capacity of nonidet P40-treated mast cells, effect of selective and non-selective histamine liberators, 95
- , role in responses of human lymphocytes, in vitro, 187P
- , vasodepressor responses in anaesthetized dogs, effect of H<sub>2</sub>-receptor antagonists, 55
- Histamine receptors, postjunctional location in mouse and rabbit vasa deferentia, 171P
- Histamine H<sub>1</sub>-receptor antagonists, structure-activity relationships, 175P
- **Histamine H<sub>2</sub>-receptor antagonists,** effect on histamineinduced release of thyrotrophin releasing hormone from hypothalamic synaptosomes, 151P
- , role in responses of human lymphocytes, in vitro, 187P
- **Histamine H<sub>2</sub>-receptors,** antagonism of responses by ranitidine, 49
- , of isolated papillary muscle, stimulation by imipromidine, 197
- **Histidine decarboxylase,** activity in isolated gastric mucosa of rat, 561P
- HMGR see S-3-hydroxy-3-methylglutaryl coenzyme A reductase
- Homocarnosine, effect on γ-aminobutyric acid inhibition of field-stimulated guinea-pig vas deferens, 142P
- Homotaurine, induction of action potentials and ESPS in 4-aminopyridine solution, 159P
- —, interaction with γ-aminobutyric acid receptor sites and its effects on the central nervous system, 163P
- Homotaurylhomotaurine, interaction with γ-aminobutyric acid receptor sites and its effects on the central nervous system, 163P
- Homovanillic acid, elevated concentrations in striatum and nucleus accumbens following capsaicin injection into substantia nigra, 493P
- , haloperidol-induced striatal increase, effect of surgical destruction of cortico-striatal projections, 128P
- , increases in areas of brain after morphine or D-Ala<sup>2</sup> metenkephalinamide administration, 156P
- **Horseradish peroxidase,** given into paleostriatum, distribution, 124P
- , injection into nucleus tegmenti pedunculopontinus and nucleus reticularis gigantocellularis, labelling of cells, 492P
- **Huntington's disease**, neuroendocrine studies in rat model, 151P
- HWA285, effect on heart performance and regional blood flow in dogs and rabbits, 723
- **Hybrid cell line, NCB-20,** binding of [<sup>3</sup>H]-prostacyclin to, 435
- Hydrazine derivatives, DNA-damaging and mutagenic activity, 145P
- 3-Hydrazino-6-[(2 hydroxypropyl)-ethyl-amino] pyridazine, effect on blood pressure and arterial smooth muscle, 188P
- Hydrocortisone, effect on [3H]-thymidine incorporation into human blood mono-nuclear cells stimulated by phytohaemagglutinin, pokeweed mitogen and phorbol-12-myristate-13-acetate, 588P
- -- , induction of phospholipase inhibitor, release from rat leucocytes, 136P

- , production of dose-dependent inhibition of histamineinduced lysosomal fragility of endothelial cells of human umbilical veins, 603
- **Hydrolytic enzymes,** in gut microflora, involvement in absorption process of oestrone sulphate in rat, 541P
- 15-Hydroxy-11α, 9α-epoxy-methano, prosta-5Z, 13E-dienoic acid see U46619
- 2-Hydroxy-2-ethyl-3-isobutyl-9, 10-dimethoxy-1,2,3,-4,6,7-hexahydro-11-bH-benzo-(a) quinolizine see Ro4-1284
- S-3-hydroxy-3-methylglutaryl coenzyme A reductase, activity, effect of individual monterpenes, 104P
- [125]-hydroxybenzylpindolol, labelling of serotonin recognition sites and  $\beta$ -adrenoceptors, in cerebral cortex, 165P
- **6-Hydroxydopamine,** effect on dopamine-β-hydroxylase activity in serum after electroconvulsive shock in rabbit, 567P
- , effect on hypertension during muscle ischaemia in the unanaesthetized rat, 508P
- , effect on increased mean arterial pressure and bradycardia produced by intracisternally administered Substance P in rabbits, 577P
- —, effect on rabbit peripheral α-adrenoceptors in vivo and in vitro, 119P
- , effect on [³H] (-)-sulpiride and [³H]-spiperone binding to rat striatal membrane, 124P
- -, lack of effect on phenylephrine contractions, 171P
- , lowering of sympathetic outflow stimulation, effect of cadmium-induced increased blood pressure, 177P
- 6-Hydroxydopamine lesions, effect on specific striatal binding of [3H]-sulpiride and [3H]-spiperone, 130P
- , of left lateral hypothalamus caused contraversive circling to apomorphine and ipsiversive circling to (+)-amphetamine, 492P
- 5-Hydroxyindoleacetic acid, decrease in rat substantia nigra after capsaicin injection, 493P
- , effect of zimelidine on morphine elevated levels in rat residual brain areas, 572P
- —, production of fall in brain levels by zimelidine, 572P
- 2-[β-(4-Hydroxyphenyl) ethyl amino methyl]-tetralone see BE22.54
  5-Hydroxytryntamine, anomalous compartmentation in in-
- .5-Hydroxytryptamine, anomalous compartmentation in intact human platelets, 449
- , contractile effects on the rat isolated vas deferens, 170P
- , decrease in substantia nigra after capsaicin injection in rat. 493P
- , effect of intrahypothalamic injection on core temperature in rat, 477
- , effect of zimelidine on morphine elevated levels in rat residual brain areas, 572P
- , effect on human basilar artery and rat aorta in vitro, 517P
- , effect on monosynaptic excitatory responses of cat spinal cord neurones, 373
- , effect on [<sup>3</sup>H]-spiperone binding in cat brain and platelets, 154P
- , effect on striatal [<sup>3</sup>H]-dopamine release and uptake in rat, 491P
- , hyper-responsiveness of venous smooth muscle, evaluation using computerized venotest, test for morphine addiction, 174P

- , increased brain levels after feeding furazolidone to ducklings, 555P
- , induction of concentration-dependent contractile response of goat isolated pulmonary arteries, 233
- , induction of contractions, effect of bencyclan, nimodipine in rabbit isolated aortic strip or arterial rings, 582P
- , induction of contractions, inhibition by nonsteroidal anti-inflammatory drugs in bovine isolated umbilical arteries, 247
- -- , induction of contractions in guinea-pig ileum, lack of effect of sea anemone (Tealia felina) toxin, 211
- , induction of platelet aggregation, inhibition by 5'-Nethyl-carbamoxamidoadenosine, 443
- , induction of veno-relaxation of goat pulmonary veins, 233
- -, lack of effect of gender on rat aorta responses, 10
- —, production of desensitization, effect on human basilar artery and rat aorta strip, 581P
- —, recognition sites, labelling in cerebral cortex by the β-adrenoceptor antagonist [125I] hydroxybenzylpindolol, 165P
- -- , reduction by benserazide in rat pineal without affecting hypothalamic 5-hydroxytryptamine, 257
- , synthesis and uptake by rat brain synaptosomes, effect of chronic administration or withdrawal of nicotine, 490P
- , uptake and deamination in isolated perfused rat lungs and lung homogenates, 731
- [14C]-5-hydroxytryptamine, liberation from platelets with or without reserpine, 349
- [<sup>3</sup>H]-5-hydroxytryptamine, measurement of rate of uptake *in vivo* in rat, 488P
- **5-Hydroxytryptamine agonists,** antagonize insulin-induced hyperphagia, 161P
- 5-Hydroxytryptamine metabolism, tolerance and cross tolerance between D-Ala<sup>2</sup>-methionine enkephalinamide and morphine actions, 156P
- **5-Hydroxytryptamine receptors,** evaluation of mechanisms on vascular tissues *in vitro*, 517P
- , in smooth muscle, mediation of response to 5hydroxytryptamine, 170P
- , inhibitory, location on dopamine nerve terminals in rat striatum, 491P
- , possible action of spiperone on human basilar artery, 581P
- **Hyoscine**, effect on responses of baboon and cat bladders to sacral ventral root stimulation and of bladder strips to transmural stimulation, 176P
- , enhancement of amphetamine-induced ipsiversive turning in unilaterally lesioned mice, 277
- , protonated and non-protonated forms, comparison of size in solution with that of atropine, 657
- protonated and non-protonated forms, affinity for muscarinic receptors in guinea-pig ileum, 657
- **Hyoscine butylbromide,** effect on human small intestinal motor activity, 685
- **Hyoscine N-oxide,** protonated and non-protonated forms, affinity for muscarinic receptors of the guinea-pig ileum, 657
- Hyperphagic response, induced by insulin or 2-deoxy-(+)-glucose glucoprivation, effect of anorectic drugs, 161P Hyperpolarization, of cockroach salivary gland, due to in-

creased membrane potassium permeability, production by A23187, 556P

Hyperprolactinemia, effect on β-endorphin and methionine enkephalin concentrations in brain and pituitary, 167P

Hypertension, acute inhibition by propanolol in sino-aortic denervated dog, effect of intracisternal administration of 5,7-dihydroxytryptamine, 411

- , cadmium induced in rat, 117P
- , effect of captopril, contribution of vasodilators released by renin, 511P
- , effect of 6-hydroxydopamine during muscle ischaemia in the unanaesthetized rat, 508P
- , effect of spironolactone in DOCA/salt rats receiving propranolol, 509P

Hyperthermia, tryptamine-induced in rats, 477

**Hyperthyroid rats**, specific binding of [<sup>3</sup>H]-spiperone to striatal, postsynaptic dopamine receptors, 125P

**Hypotension,** induction by adrenaline in conscious dogs, 520P

- , induction by bromocriptine in spontaneously hypertensive rats, involvement of adrenal glands, 419
- , induction by clonidine and guanabenz, effect of piperoxan, phentolamine and phenoxybenzamine in rat. 580P
- induction by substance P in rat, 504P

**Hypothalamic receptors,** one specific for 5-hydroxy-tryptamine the other for tryptamine in rats, 477

Hypothalamo-cardioinhibitory response, attenuation by αadrenoceptor blocking drugs in rabbit, 515P

Hypothalamo-pituitary  $\gamma$ -aminobutyric acid system, effect on plasma  $\gamma$ -aminobutyric acid and prolactin secretion, 150P

**Hypothalamus,** benserazide has no effect on 5-hydroxytryptamine while reducing indoleamine levels in pineal, 257

- H<sub>2</sub>-mediated histamine-induced release of thyrotrophin releasing hormone from synaptosomes, 151P
- , injection of N<sup>6</sup>-2'-O-dibutyryl adenosine 3'5'monophosphate or dopamine, effect on thermoregulation in restrained mice, 566P
- , rabbit, electrical stimulation-evoked release of [<sup>3</sup>H]noradrenaline, effect of amphetamine, 499P
- -- , rabbit, presynaptic dopamine-like inhibitory receptors on the noradrenergic nerve endings, 497P

Hypothermia, apomorphine-induced, enhancement by morphine, blockade by melanotrophin release inhibiting factor and cyclo(Leu-Gly) in rat, 707

5-hydroxytryptamine-induced in rats, 477

**Hypothyroid rats,** specific binding of [<sup>3</sup>H]-spiperone to striatal, postsynaptic dopamine receptors, 125P

**Hypoxanthine**, effect on dose of arachidonic acid required to produce a 50% fall in blood pressure in rabbit, 521P

 -- , plasma levels, correlation with dose of arachidonic acid required to produce a 50% fall in blood pressure in rabbit, 521P

**Hypoxia,** production of increase in resting tension in isolated heart, attenuation by diltiazem, 190P

1

**Ibotenic acid,** production of circling and seizures in rat, 570P

- **Ibuprofen,** production of dose-dependent inhibition of histamine-induced lysosomal fragility of endothelial cells of human umbilical veins, 603
- ICI 55897, effectiveness against chronic and developing arthritis in rat, 523P
- ICI 63197, effect on guinea-pig central and peripheral airways smooth muscle in vitro, 533P
- ICI 125,211, effect on [3H]-cimetidine binding and H<sub>2</sub> dependent adenylate cyclase activity in guinea-pig mucosa, 548P

**Ileum,** guinea-pig, action of Sgd 101/75 on α-adrenoceptors, 535P

- , guinea-pig, affinities of the protonated and nonprotonated forms of hyoscine and hyoscine N-oxide for muscarinic receptors, 657
- -, guinea-pig, agonism by benzomorphans, 13
- guinea-pig, alteration of smooth muscle contractility after muscarinic agonist-induced potassium ion loss, 609
- -, guinea-pig, anthopleurin-B-induced relaxation, 239
- , guinea-pig, bethanechol-induction of contractions, lack of effect of ranitidine, 49
- —, guinea-pig, coaxially stimulated, distribution and action of α- and β-adrenoceptor agonists, 201
- , guinea-pig, effect of halothane on the incorporation of [14C]-serine into phospholipid in guinea-pig ileum, 397
- —, guinea-pig, effect of Sgd 101/75 on electricallyinduced twitches, 535P
- , guinea-pig, effect of venom of Sydney funnel-web spider on motor transmission, 335
- , guinea-pig, mechanism of action of muscarine on longitudinal muscle, 225
- -- , guinea-pig, production of contractions, by substance P, 504P
- , guinea-pig, responses to histamine, acetylcholine, 5hydroxytryptamine and potassium chloride, effect of sea anemone (*Tealia felina*) toxin, 211

# 4(2-Imidazoline-amino)-2-methyl-indazolchlorhydrate see Sgd 101/75

- Imipramine, effect of chronic treatment on [3H]imipramine, [3H]-dihydroalprenolol and [3H]spiperone binding, 154P
- , effect of gender differences on hepatic microsomal metabolism in rat, 553P
- , effect on spontaneous and drug-induced liberation of [¹⁴C]-5-hydroxytryptamine and [³H]-dopamine, 349
- —, effects on the accumulation of [3H]-5-hydroxytryptamine into sub-fractions of rat brain, 488P
- [<sup>3</sup>H]-imipramine, high affinity binding to human platelets, in depressed patients and health volunteers, 152P
- , specific binding, effect of chronic treatment of imipramine, 154P

Impromidine, displacement of [<sup>3</sup>H]-cimetidine from guinea-pig heart membrane preparation, 547P

- , effect on [<sup>3</sup>H]-cimetidine binding and H<sub>2</sub> dependent adenylate cyclase in guinea-pig gastric mucosa, 548P
- , partial agonist of histamine H<sub>2</sub> receptors in isolated papillary muscle from guinea-pig, 197
- production of concentration-related increased in gastric acid secretion in rabbit isolated fundic mucosa, 560P
- positive inotropic effect on isolated papillary muscle of the guinea-pig, 197

Immune mechanisms, effect of vinyl chloride in guinea-pig, 553P

**Immunodepressive drugs,** inhibition of degradation of cholinoceptors in rat myotubes *in vitro*, 110P

**Indapamide**, effect on the responses to electrical stimulation of *in vitro* preparations from rat, 172P

**Indocyanine green,** effect on prostaglandin  $E_2$  inactivation in rat and human lung, 715

**Indomethacin**, effect on erythema following intradermal injection of adenosine triphosphate in humans, 516P

- , effect on production of prostacyclin-like substance and on hypertensive effect of renin, 511P
- , effect on synthesis of arachidonate oxygenase products in rheumatoid and non-rheumatoid synovial tissue in humans, 522P
- , increase in vasoconstrictor response to noradrenaline in isolated perfused stomach, abolition of vasodilator effect of arachidonic acid, 139P
- , induction of gastric erosions in rat, 559P
- , inhibition of angiotensin II-induced contractions of isolated artery and binding to particulate fraction, 247
- —, inhibition of contractile response of guinea-pig ileum to sea anemone (*Tealia felina*) toxin, 211
- , lack of effect on 5-hydroxytryptamine-induced venorelaxation, 233
- —, modification of uterotrophic responses to oestradiol- $17\beta$  in rat, 550P
- , production of dose-dependent inhibition of histamineinduced lysosomal fragility of endothelial cells of human umbilical veins, 603

Inflammation, acute lack of effect of ICI 55897 in rat, 523P

—, measurement of copper concentrations and ceruloplasmin activity, 137P

**Inflammatory agents,** effects on lysosomal fragility of endothelial cells of umbilical veins of humans, 603

**Inhibitory receptors,** dopamine-like pre-synaptic, location on noradrenergic nerve endings of the rabbit hypothalamus, 497P

 , of anococcygeus and bovine retractor penis muscles, effect of ethanol, 528P

**Inhibitory transmission,** effect of venom of Sydney funnelweb spider in rat anococcygeus, 335

Inotropic effects, age related effects of ouabain in isolated rabbit atria, 263

- , of taurine, and calcium and levels of taurine in ventricular strips, 115P
- , on isolated guinea-pig isolated atrium of isoprenaline and orciprenaline, 635

**Input conductance,** effect of SL 75 102 or γ-aminobutyric acid in dorsal root ganglion neurones, 355

Intensity gradient, effect of haloperidol and cocaine, 489P Intention tremor onset pressure, effect of some anti-convulsant, sedative and anti-Parkinsonian drugs in mice, 502P

**Intestinal barrier,** morphological integrity, effect of polyethylene glycol 2000 and polyoxyethene (40) stearate in rat, 557P

Intestine, guinea-pig, effect of muscarinic agonists on membrane potential, potassium efflux and longitudinal muscle contraction, 319

- -, rat, absorbtion of oestrone sulphate, 541P
- , rat, changes after exposure to polyethylene glycol 2000 and polyoxyethylene (40) stearate, 557P

**Intracellular acidosis,** prevention by creatinol O-phosphate, 578P

**Iproniazid,** DNA-damaging and mutagenic activity, 145P **Ipsiversive turning,** amphetamine-induced, enhancement by procyclidine and hyoscine in unilaterally lesioned mice. 277

**Ischaemic heart disease**, therapeutic usefulness of bepridil, 114P

1-[3-Isobutoxy-2-(benzylphenyl)-amino] propyl pyrrolidine hydrochloride see Bepridil

**Isobutylmethylxanthine**, effect on guinea-pig central and peripheral airways smooth muscle in vitro, 533P

 , induction of inhibition in rabbit anococcygeus and bovine retractor penis muscle, effect of ethanol, 528P

Isocarboxazid, DNA-damaging and mutagenic activity, 145P

**Isolation,** effect on blood pressure in spontaneously hypertensive rats, 579P

Isoprenaline, action in guinea-pig ileum, 201

- —, determination of dissociation constants and relative efficacy on guinea-pig isolated atrium using an irreversible β-adrenoceptor antagonist, 635
- , effect on acetylcholine-induced contractions in pregnant rat uterus, 530P
- , effect on synthesis of prostaglandin  $E_2$  and  $F_{2\alpha}$  by rat cerebral cortex, 525P
- -, effect on transmitter release in rat atrium, 191P
- , failure to mimic adrenaline-induced hypotension and bradycardia in conscious dogs, 520P
- —, induction of physiological tremor, method for assessing effect of  $\beta$ -adrenoceptor blocking drugs, 133P
- , induction of relaxation response of stomach smooth muscle, abolition by propranolol plus phentolamine, 558P
- , inhibitory responses in rabbit anococcygeus and bovine retractor penis muscles, effect of ethanol, 528P
- , inotropic and chronotropic responses of guinea-pig isolated atrium, 635
- —, potentiation by haloalkylamines on guinea-pig trachealis in relation to α-adrenoceptor blocking ability on rat anococcygeus, 531P
- (±)-Isoprenaline, effect on renal blood flow and renal vascular resistance in guinea-pig, 507P
- (-)-Isoprenaline, responses of guinea-pig atrium and rat uterus, lack of effect of ranitidine, 49
- , vasodepressor dose-response curves, effect of ranitidine in anaesthetized dog, 55

**Isopropyl methoxamine,** effect on hepatic alkaline phosphatase in mice *in vivo*, 8

## K

K11550, potency in inhibition of gastric secretion, stressinduced gastric lesions and in producing enteropooling activity in rats, 178P

Kainic acid, effect on haloperidol-induced catalepsy, 128P

- , effect on [<sup>3</sup>H](-)-sulpiride and [<sup>3</sup>H]-spiperone binding in rat striatal membrane, 124P
- , lesioning, to produce a rat model for Huntington's disease, 151P
- , unilateral intrastriatal injection, production of circling and seizures in rat, 570P

**Kainic acid lesions,** effect on specific striatal binding of [<sup>3</sup>H]-sulpiride and [<sup>3</sup>H]-spiperone, 130P

 , of nucleus tegmenti pedunculopontinus, effect on apomorphine- and (+)-amphetamine-induced circling, 492P

**Kassinin**, effect on gastric emptying of conscious rat, 221

**Kidney,** rat, cadmium potentiation of responses to noradrenaline, potassium and electrical stimulation, 117P

**Kidney,** rat, nephrocalcinosis after long term feeding with semi-synthetic diet containing bovine plasma protein, 181P

 , rat, reduction by indapamide of vasoconstriction elicited by electrical stimulation, 172P

 , isolated perfused, effects of cadmium on responsiveness to electrical stimulation, noradrenaline and potassium ions, 189P

 , sympathetic efferent nerve activity, effect of lower body negative pressure, SQ 20881 and Saralsin, 514P

 -- vasculature, effects of dopamine receptor agonists and their antagonism by sulpiride, in guinea-pig, 507P

**Kindling,** effect on cyclic guanosine 3',5'-monophosphate concentrations in amygdala in rat, 500P

 , of amygdala, induction of epilepsy, effect of grand mal drugs in rat, 501P

**Kinin,** induction of catecholamine discharge from adrenals, responsibility for hyperglycemic effect of lysophosphatidylserine, 108P

**Kinin-like substance,** release by renin, contribution to antihypertensive activity of captopril, 511P

**Kininogen-kinin system,** role in lysophosphatidylserineinduced mast cell activation, 108P

L

Labetalol, intrinsic activity on guinea-pig trachealis muscle in vitro, 532P

**β-Lactamines,** biliary excretion determined *in vivo* and *in vitro*, 185P

Lanthanide ions, effect on histamine secretion from rat peritoneal mast cells, 341

**Lanthanum,** effect on histamine release from rat peritoneal mast cells, 341

—, effect on resting output and tissue levels of acetyl-

choline in rat diaphragm preparation, 461 **Leucocytes,** antigen-induced rise in counts, effect of vinyl

, storage and steroid release of a phosphoplipase inhibitor, 136P

Leukaemia, action of dimethyltriazenes, 107P

chloride in guinea-pig, 553P

**Leukotriene B**<sub>4</sub>, effect of intradermal injection on plasma exudation in rabbit, guinea-pig and rat, 483

 —, mediation of vascular permiability in rabbit, guinea-pig and rat, 483

 , plus prostaglandin E<sub>2</sub>, effect of intradermal injection on plasma exudation in rabbit, guinea-pig and rat, 477

Leukotriene C<sub>4</sub>, induction of increased thromboxane and prostaglandin release from rat peritoneal macrophages, 389

**Leukotriene D<sub>4</sub>**, induction of increased prostaglandin and thromboxane release from rat peritoneal macrophages, 389

**Levorphanol,** is 20 times more potent than dextrorphan in decreasing food-reinforced fixed ratio 15 responding in male rats, 245

Lewis lung carcinoma, antimetastatic action of dimethyltriazenes in mice, 107P

Lidocaine, effect of gender differences on hepatic microsomal metabolism in rat, 553P

**Lignocaine,** effect on histamine-induced lysosomal fragility of endothelial cells of human umbilical veins, 603

, inhibition of lymphocyte capping and transformation,

 , pharmacokinetics, effect of sotalol-reduction of liver blood flow in intact rats, 540P

(+)-Limonene, effect on bile flow, bile composition, and hepatic HMGR activity in rat, 104P

Lincomycin, plus neomycin, effect on absorption of oestrone sulphate in isolated segments of rat small intestine, 541P

**Lipophilicity**, contribution to irreversible binding of alkylating cardiotonic steriods to myocardial sodiumpotassium dependent adenosine triphosphatase, 25

**Lipopolysaccharide**, induction increased of prostaglandin and thromboxane release from rat peritoneal macrophages, 389

**Lipoxygenase**, inhibition, role in the effects of 5,8,11,14-eicosatetraynoic acid in sensitized guinea-pig trachea, 689

**Lipoxygenase produucts,** from decidual tissue, inhibition of myometrial prostacyclin formation, 138P

**Lisuride**, antagonism of hyperphagic response to 2-deoxy-(+)-glucose, 161P

**Lithium,** effect on manganese activated pyruvate kinase, 506P

, inhibition of glycolysis in human erythrocytes, 576P

**Liver,** alkaline phosphatase, induction by adrenaline involvement of  $\beta$ -adrenoceptors in mice *in vivo*, 8

 , duckling, monoamine, oxidase inhibition by furazolidone, 555P

 , effect of emulsifiers on elimination of fat emulsions, measurement by gamma scintigraphy, 180P

 mouse, concentrations of 2,3,7,8-tetrachlorodibenzop-dioxin 2 weeks after a single dose, effect of addition of charcoal or cholic acid, 181P

 rat, effect of diflunisal on energy metabolism in mitochondria, 552P

 , rat, effect of long term feeding with semisynthetic diet containing bovine plasma protein, 181P

, rat, uptake of [<sup>3</sup>H]-thymidine, effect of partial hepatectomy and reserpine, 542P

**Liver blood flow,** sotalol-induced reduction, effect on kinetics of lignocaine in intact rat, 540P

Liver microsomal enzymes activity, effect of long term feeding with semi-synthetic diet containing bovine plasma protein, 181P

**Liver-microsomes,** rat, effect of streptozotocin-induced diabetes on glucuronyl transferase activity, 539P

**Lobster claw-opener muscle,** L-cysteate mimics action of L-aspartate, 113P

**Locomotor activity,** effect of clonidine and guanabenz in rat, 580P

—, effect of low doses of methylmercury, 168P

 , spontaneous, increase after capsaicin injection into substantia nigra of rat, 493P

- , stimulation by injection of substance P and substance P-(1-9)-nonopeptide into ventral tegmentum, 504P
- Locus coeruleus cells, effect of various adrenoceptor agonists and antagonists on spontaneous firing rate of, in rat, 498P
- **Lofentanil,** receptor occupation and *in vivo* pharmacological effects in rat, 487P
- **Longitudinal muscle,** guinea-pig mechanism of action of muscarine, 225
- —, guinea-pig intestine, effect of muscarinic agonists on contraction, 319
- Low molecular weight Met-enkephalin-like material, effect of reserpine on concentrations in rat adrenal gland, 146P
- **Lower body negative pressure,** and interactions of angiotensin and sympathetic reflexes in cat, 514P
- **Lumenal fluid,** movement across intestinal barrier, effect of polyethylene glycol 2000 and polyoxyethylene (40) stearate in rat, 557P
- **Lung,** guinea-pig, effect of AH 19437 on concentrationeffect curves of U-46619 and dose-effect curves to thromboxane A<sub>2</sub>, 524P
- —, rat, ontogenesis of uptake and deamination of 5hydroxytryptamine, dopamine and βphenylethylamine in isolated perfused lung and lung homogenates, 731
- , rat and human, effect of clinically used dyes on prostaglandin E<sub>2</sub> inactivation, 715
- **Lung parenchymal strip,** guinea-pig, effects of constrictor and relaxant drugs, 533P
- Lymphocytes, human, role of histamine and cimetidine in responses, in vitro, 187P
- murine B, inhibition of capping by propranolol and related compounds, 69
- , murine T, inhibition of phytohaemagglutin-induced transformation by propranolol and related compounds,
- T-, proliferation, inhibitory effects of cyclosporin-A and glucocortico-steroids in human mononuclear blood cells, 588P
- Lysolecithin, plus egg lecithin, effect on elimination of fat emulsions, measurement by gamma scintigraphy, 180P
- **Lysophosphatidylserine,** induction of mast cell activation *in vivo*, 108P
- Lysosomal fragility, of endothelial cells from human umbilical veins, effects of inflammatory agents and their inhibition by anti-inflammatory agents, 603
- **Lutetium,** effect on histamine release from rat peritoneal mast cells, 341

## M

- Macrophages, rat, induction of increased prostaglandin and thromboxane release by leukotrienes C<sub>4</sub> and D<sub>4</sub> and lipopolysaccharide, 389
- Magnesium, urinary excretion, reduction by triamterene, amiloride and frusemide and amiloride in conscious saline-loaded rats, 285
- Magnesium cations, inhibition of catecholamine secretion from cat adrenal medulla by sodium free medium, 305
   Magnesium ion free Krebs solution, effect on agonist re-

- sponses in the bisected vas deferens of rat, 564P
- **Malondialdehyde,** release from guinea-pig lung fragments, effect of 5,8,11,14-eicosatetraynoic acid and Ro3-1314,689
- Manganese activated pyruvate kinase, effects of lithium and calcium, 506P
- **Manual co-ordination,** method for screening the effect of drugs in the marmoset, 494P
- Mast cells, peritoneal, effect of disodium cromoglycate on calcium acitivated adenosine triphosphatase in rat, 549P
- , rat isolated, acetylcholine interaction with muscarinic cholinoceptors, 109P
- , rat peritoneal, effect on viability, of nonidet P40, in vitro, 95
- , rat peritoneal, lysophosphatidylserine-induced activation in vivo, 108P
- **Mazindol,** antagonism of hyperphagic response to 2-deoxy-(+)-glucose, 161P
- Mebanazine, DNA-damaging and mutagenic activity, 145PMeclofenamate, inhibition of angiotensin II-induced contractions of isolated artery and binding to particulate fraction, 247
- **Mecylamine**, lack of effect on anthopleurin-B-induced contraction of taenia caeci of guinea-pig, 239
- **Median forebrain bundle,** detection of electrical stimulation in rat, 489P
- Median raphe nucleus, neurotoxic lesion protects rats from electroconvulsive shock-induced retrograde amnesia of passive avoidance conditioning, 169P
- Melanotrophin release inhibiting factor, blockade of morphine-enhancement of hypothermic response to apomorphine in rat, 707
- , effect on the tolerance to morphine-induced antinociception in the rat, 707
- **Melatonin,** reduction by benserazide in rat pineal without affecting hypothalamic 5-hydroxytryptamine, 257
- **Melperone**, effectiveness for prevention of early postinfarction ventricular dysrhythmias in rat, 512P
- Membrane depolarization, by vasopressin, noradrenaline or oxytocin in smooth muscle cells of guinea-pig mesenteric vessels, 673
- **Membrane potential,** effect of SL 75 102 or γ-aminobutyric acid in dorsal root ganglion neurones, 355
- , of guinea-pig muscle, action of muscarinic agonists, 319
- , in normal and denervated mouse neuromuscular junctions, effect of Anemonia sulcata toxin II, 546P
- Membrane properties, of smooth muscle cells of guinea-pig mesenteric vessels, effect of vasopressin, oxytocin and noradrenaline, 673
- Membrane resistance, increase by vasopressin and noradrenaline in smooth muscle cells of guinea-pig mesenteric cells, 673
- **Membrane stabilization,** relationship with the action of propranolol and related compounds to inhibit lymphocyte capping and transformation, 69
- **Menthol,** effect on bile flow, bile composition and HMGR activity in rats, 104P
- **Menthone,** effect on bile flow, bile composition and hepatic HMGR activity in rat, 104P
- **Mepyramine**, displacement to right of vasodepressor doseresponse curve to histamine in anaesthetized dog, 55

- , effect on anaphylaxis- and histamine-produced increases in gastric intraluminal pressure in guinea-pig, 536P
- , effect on gastric acid secretory response to histamine, 560P
- , effect on histamine-induced increase in lysosomal fragility of endothelial cells from human umbilical veins, 603
- , lack of blockade of histamine-induced thyrotrophin releasing hormone release from hypothalamic synaptosomes, 151P
- —, modification of uterotrophic responses to oestradiol-17β in rat, 550P
- 3-Mercaptopropionic acid, effect on sensitivity to, of administration of benzodiazepines in rats and mice, 495P
- Mesenteric artery, rabbit, prostaglandin release, effect of nerve stimulation and of administration of noradrenaline of potassium chloride, 89
- , rat, antagonism of action of noradrenaline by flunarizine and cinnarizine, 583P
- Mesenteric blood vessels, dilatation of resistance vessels by inhibitory extract from bovine retractor penis muscle, 365
- , guinea-pig, effect of vasopressin, noradrenaline or oxytocin on smooth muscle cells, 673
- Mesentry root, crude microsomal fractions, inhibition of [<sup>3</sup>H]-etorphine binding to rat brain microsomes, 147P
- Methacholine, low concentrations, stimulation of gastric acid secretion in mouse isolated stomach, 291
- production of concentration-related increases in gastric acid secretion in rabbit isolated fundic mucosa, 560P
- , stimulation of gastric acid secretion, effect of prostaglandin E<sub>2</sub> in rat isolated stomach, 291
- **Methergoline**, effect on 5-hydroxytryptamine- and tryptamine-induced changes in core temperature in rat, 477
- , effect on striatal [<sup>3</sup>H]-dopamine release and uptake in rat, 491P
- Methiothepin, effect on 5-hydroxytryptamine- and tryptamine-induced changes in core temperature in rats, 477
- **Methohexitone,** potentiation of tetraethylammoniuminduced contracture of chick biventer cervicis muscle preparation, 111P
- Methoxamine, induction of rhythmic contractions in rat vas deferens, effect of calcium antagonists, 563P
- 5-Methoxy N-N-dimethyltryptamine, effect on striatal [3H]-dopamine release and uptake in rat, 491P
- 5-Methoxytryptamine, effect on human basilar artery and rat aorta in vitro, 517P
- , effect on striatal [<sup>3</sup>H]-dopamine release and uptake in rat, 491P
- Methoxyverapamil, effect on methoxamine and bariuminduced rhythmic contractions of rat vas deferens, 563P
- , effect on potassium contractures in isolated rat vas deferens, 143P
- —, effect on transmitter release in rat atrium, 191P
- , inhibition of catecholamine secretion from cat adrenal medulla by sodium free medium, 305
- N-methyl-p-aspartic acid, production of circling and seizures in rat, 570P

- N-Methyl-benzylamine, inhibition of noradrenaline uptake in rat and mouse vas deferens, 173P
- cis-2-Methyl-4-dimethylaminomethyl-1, 3-dioxolane methiodide, effect on contractile response of guineapig ileum smooth muscle to subsequent doses of cis-2methyl-dimethylaminomethyl-1, 3-dioxolane or potassium chloride, 609
- [1α (Z), 2β, 5α]-Methyl 7-[2-(4-morpholinyl)-3-oxo-5-(phenyl-methoxy) cyclopentyl]-5-heptoate see AH 19437
- Methyl-p-toluene sulphonate of diethylamino-3-β-ethoxyhydroxy-pregn-5-ene see TX 3047
- α-**Methyl-p-tyrosine**, augmentation of hypotensive response to bromocriptine in spontaneously hypertensive rats, 419
- **Methylene blue,** effect on prostaglandin  $E_2$  inactivation in rat and human lung, 715
- **Methylfurmethide,** action on membrane potential, potassium efflux, and contraction of longitudinal muscle of guinea-pig intestine, 319
- 2-Methylhistamine, effect on [<sup>3</sup>H]-cimetidine binding and H<sub>2</sub> dependent adenylate cyclase in guinea-pig gastric mucosa, 548P
- **4-Methylhistamine**, effect on [<sup>3</sup>H]-cimetidine binding and H<sub>2</sub> dependent adenylate cyclase in guinea-pig gastric mucosa, 548P
- , effect on lysosomal fragility of endothelial cells from human umbilical veins, 603
- N<sup>∞</sup>-methylhistamine, no detection of, in rat, mouse or guinea-pig brain by sensitive, specific radioenzymatic assay, 505P
- **D,L-α-Methylghutamic acid,** effect on kainic acid-induced circling in rat, 570P
- Methylmercury, behavioural effects induced by low doses,
- α-Methylnoradrenaline, vasoconstricor responses of rabbit hid limb effect of rauwolscine and prazosin, 120P
- **3-Methyltriazolo [4,3b] pyridazine,** effect on blood pressure and arterial smooth muscle, 188P
- 5-Methyltryptamine, effect on human basilar artery and rat aorta in vitro, 517P
- , effect on striatal [3H]-dopamine release and uptake in rat, 491P
- N-methyltryptamine, effect on human basilar artery and rat aorta in vitro, 517P
- , effect on striatal [<sup>3</sup>H]-dopamine release and uptake in rat, 491P
- **Methysergide,** after guanethidine, blockade of phasic response to 5-hydroxytryptamine and rhythmic contractions were reduced or abolished, 170P
- , antagonism of 5-hydroxytryptamine-induced arterial contractile responses, 233
- , effect on 5-hydroxytryptamine- and tryptamineinduced changes in core temperature of rat, 477
- , lack of effect on 5-hydroxytryptamine-induced venorelaxation, 233
- -- , reduction or abolition of 5-hydroxytryptamineinduced contractions, 170P
- Metiamide, abolition of pentagastrin-induced increase of histidine decarboxylase activity in isolated gastric mucosa of rat, 561P
- -, antagonism of effects of histamine in rat uterus, 49
- --- , blockade of histamine-induced thyrotrophin releasing

- hormone from hypothalamic synaptosomes, 151P
- , displacement of  $\tilde{I}^3H$ ]-cimetidine from guinea-pig heart preparation, 547P
- , effect on [<sup>3</sup>H]-cimetidine binding and H<sub>2</sub> dependent adenylate cyclase activity in guinea-pig gastric mucosa, 548P
- -, effect on gastric acid secretion, 49
- , effect on gastric acid secretory response to histamine and methacholine in rabbit isolated fundic mucosa, 560P
- , lack of effect on gastric acid secretion of histidine decarboxylase activity in isolated gastric mucosa of rat, 561P
- , lack of effect on 5-hydroxytryptamine-induced venorelaxation, 233

**Metoclopramide**, effect on hypotensive response to bromocriptine in spontaneously hypertensive rats, 419

**Metroprolol**, effect on adrenaline-induced hypotension and bradycardia in conscious dogs, 520P

- , effect on dose response curves for tremor and tachycardia following isoprenaline, 133P
- , inhibition of lymphocyte capping and transformation,
   69

# MeTyr-DAla-Gly-MePhe-Met(O)ol see FW 34-569

**Mexiletine**, effect of urinary pH and volume on elimination, 135P

**Microelectrodes,** carbon fibre, for electrophysiological and electrochemical studies, 507P

Microsomes, guinea-pig heart, interaction of potassium with the two ouabain specific binding sites, 513P

Miniature endplate potential, decrease of amplitude by polymyxin B, 41

 , increase in frequency by Anemonia sulcata toxin II at mouse neuromuscular junction, 546P

Miosis, pilocarpine-evoked, reduction by DL-308, thioridazine and atropine, 131P

Mitochondria, isolated from rat liver, effect of diflunisal on energy metabolism, 552P

Mitogenic response, of lymphocytes, effect of histamine and cimetidine, in vitro, 187P

Monoamine oxidase, activity towards 5-hydroxytryptamine, β-phenylethylamine and dopamine in lung homogenates from rats, 731

 , production of inhibition in hearts, brains and duodenal mucosa of poultry by furazolidone, 555P

Monoamine oxidase inhibitors, hydrazine derived, DNAdamaging and mutagenic activity, 145P

**Monosynaptic excitation,** responses of cat spinal cord neurones, effect of (-)-baclofen, 373

Morphine, addiction, diagnostic tests, 174P

- , administration to rats, catatonic effect and enhanced dopamine metabolism, 156P
- --- , comparative potency in guinea-pig ileum, mouse vas deferens and rat vas deferens, 13
- -- , emetic action following administration into cerebral ventricles of dogs, 471
- , enhancement of hypothermic response to apomorphine, blockade by melanotrophin release inhibiting factor and cyclo (Leu-Gly) in rat, 707
- , induction of naloxone-sensitive inhibition of electrically evoked acetylcholine release, 158P
- , inhibition of bradycardia induced by vagal stimulation, effect of morphine pretreatment, 584P

- , lack of effect on 5-hydroxytryptamine-induced venorelaxation, 233
- -, penetration of cerebrospinal fluid in rats, 571P
- production of raised corticosterone plasma levels and raised residual brain levels of 5-hydroxytryptamine and 5-hydroxyindoleacetic acid in rat, 572P
- -- , reduction of contraction of ileal longitudinal muscle of guinea-pig elicited by muscarine, 225
- , tolerance, effect on action of morphine to enhance dopamine and 5-hydroxytryptamine metabolism, and the production of catatonia, 156P
- , tolerance, effect on morphine inhibition of vagallyinduced bradycardia in rat, 584P
- , tolerance development, comparison with development of D-Ala<sup>2</sup>-methionine-enkephalin tolerance in two strains of rats, 166P

Motility, stomach, effects of anaphylaxis in guinea-pig, 536P

Motor activity, of human small intestine, 685

Motor behaviour, tolerance and cross tolerance between D-Ala<sup>2</sup> methionine enkephalinamide and morphine actions, 156P

Motor co-ordination, method for screening the effects of drugs in marmoset, 494P

Motor responses, of rat anococcygeus muscle to field stimulation, noradrenaline or carbachol, effect of ethanol, 528P

**Motor transmission,** effect of venom of Sydney funnel-web spider in rat anococygeus, 335

MR 2034, agonist in guinea-pig ileum and mouse vas deferens, antagonist in rat vas deferens, 13

Mucosal blood flow, lack of effect of  $\beta$ -adrenoceptor agonists on, Shay rats, 177P

Muscarine, induction of contraction of ileal longitudinal muscle of guinea-pig, 225

 , potentiation of effect of acetylcholine on ileal longitudinal muscle of guinea-pig, 225

Muscarinic cholinoceptors, interaction with acetylcholine in rat isolated mast cells, 109P

Muscarinic receptors, guinea-pig ileum, affinities of the protonated and non-protonated forms of hyoscine and hyoscine N-oxidase, 657

Muscimol, effect on prolactin plasma concentrations, in rats with kainic lesions, 151P

- , induction of action potentials and ESPS in 4aminopyridine solution, 159P
- —, interaction with γ-aminobutyric acid receptor sites and its effects on central nervous system, 163P
- , potentiation of growth hormone releasing effect, in rats with kainic lesions, 151P

[<sup>3</sup>H]-muscimol, radioreceptor assay for γ-aminobutyric acid in human cerebrospinal fluid, 164P

Muscle, rat, effect of dantrolene sodium on twitch contractions, 665

Muscle activity, effect of penetetrazol, 75

Muscle fibres, effect of (-)-emetine after chronic application to the nerve, 112P

Muscle ischaemia, effect of centrally administered 6hydroxydopamine of hypertension in unanaesthetized rat, 508P

Muscle membrane, depolarization by Anemonia sulcata toxin II at mouse neuromuscular junction, 546P

Mutagenic activity, of hydrazine monoamine oxidase in-

, , ,

hibitors in bacteria, 145P

Myasthenia gravis, drugs used for treatment, effect on cholinoceptor degradation in rat myotubes in vitro, 110P

Myasthenia sera, effect on cholinoceptor degradation in rat myotubes in vitro, 110P

Myocardial infarction, induction of cardiac arrhythmias, role of  $\alpha$ -adrenoceptors in spinal cord, 192P

reduction of CPK levels in humans, 578P

Myocardial ischaemia, electrophysiological, metabolic and haemodynamic consequences, effect of bepridil, 114P

-, haemodynamic effects of sulphinpyrazone, 5

Myocardial oxygen extraction, decrease after bepridil, 114P Myoclonus, forepaw, development after instriatal picrotox-in administration coupled with concurrent damage to the overlying sensorimotor cortex in rats, 503P

Myotubes, rat, degradation of cholinoceptors, 110P

#### N

Naloxone, administered to conjuctival sac, reversal of morphine-induced miosis, test for morphine addiction, 174P

- , effect of pretreatment on emetic responses induced by intraventricular met-enkephalin, morphine and apomorphine in dogs, 471
- , effect on increased mean arterial pressure and bradycardia produced by intracisternally administered substance P in rabbits, 577P
- , effect on the intention tremor onset pressure and resting tremor onset pressure in mice, 502P
- , emetic effect following administration into cerebral ventricles of dog, 471
- , excitation by, of spinal nociceptive units fails to occur in hypophysectomized cats, 157P
- --- , no antagonism of baclofen analgesia by, except in jump-latency hot-plate test in mice, 156P
- , reduction by, of depressant effects of leucine- and methionine-enkephalin on chemoreceptor activity in cats, 544P
- , reversal of morphine inhibition of electrically evoked acetylcholine release from guinea-pig thalamus in vitro, 158P

NCB-20 neuronal cell line, [<sup>3</sup>H]-prostacyclin binding to, 435

Neck, effect of emulsifiers on elimination of fat emulsions, measurement by gamma scintigraphy, 180P

Neodymium, effect on histamine release from rat peritoneal mast cells, 341

Neomycin, plus lincomycin, effect on absorbtion of oestrone sulphate in isolated segments of rat small intestine, 541P

Nerve stimulation, on release of prostaglandins  $I_2$ ,  $E_2$  and  $F_{2\alpha}$  from perfused mesenteric arterial bed of rabbit, 89

Neuroleptic drugs, inhibition of specific striatal binding of [<sup>3</sup>H]-sulpiride, 129P

**Neuromuscular blockade,** production by polymyxin B, 41 **Neuromuscular junction,** frog, action of polymyxin B, 41

Neuronal  $\alpha$ -adrenoceptors, rat vas deferens, effect of yohimbine analogues, 526P

Neurotoxic lesion, of median raphe nucleus, protection from electroconvulsive shock-induced retrograde am-

nesia of passive avoidance conditioning, 169P

Neurotransmitters, uptake assessment in vivo in rat, 488P Nialamide, DNA-damaging and mutagenic activity, 145P

Nickel cations, inhibition of catecholamine secretion from cat adrenal medulla by sodium free medium, 305

Nicotine, effect of chronic administration and withdrawal on 5-hydroxytryptamine synthesis and uptake by rat brain synaptosomes, 490P

- -, induction of relaxation in guinea-pig trachealis, 530P
- , production of relaxations in monkey and human arterial strip contracted with prostaglandin  $F_{2\alpha},\,281$

Nicotinic acid, antilipolytic action, age related changes, 106P

Nifedipine, effectiveness for prevention of early postinfarction ventricular dysrhythmias in rat, 512P

 , effects on methoxamine and barium-induced rhythmic contractions of rat vas deferens, 563P

Nimodipine, effect on cerebral and peripheral vascular smooth muscle in rabbit, 582P

Nitrazepam, acute administration of high doses leads to withdrawal hyperexcitability of central nervous system of rat, 495P

Nomifensine, antagonism of dopamine release after removal of Na\* from perfusion medium, 160P

- , effect on amphetamine inhibition of stimulationevoked release of [3H]-dopamine, 499P
- , effect on dopamine synthesis in striatal synaptosomes, 127P

Non-adrenergic, non-cholinergic nerves, innervation of large cerebral arteries of monkey and human, 281

Non-adrenergic inhibitory mechanism, mediation of anthopleurin-B-induced relaxation of ileum of guineapig, 239

Non-adrenergic inhibitory neurones, possible extrinsic input from recurrent laryngeal nerves in guinea-pig trachealis, 554P

**Non-cholinergic, non-adrenergic nerves,** innervation of large cerebral arteries of monkey and human, 281

Nonidet P40, effect on function of rat peritoneal mast cells in vitro, 95

Noradrenaline, action in guinea-pig ileum, 201

- , cardioinhibitory responses to, effect of prazosin and BE 2254 in pithed rats, 586P
- —, central and peripheral release of, effect of single and repeated electroconvulsive shock in rabbits, 567P
- -, detection by carbon fibre microelectrodes, 507P
- , effect on acetylcholine-induced contractions in pregnant rat uterus, 530P
- , effect on cadmium-induced increased blood pressure in rat, 117P
- -- , effect on membrane and contractile properties of smooth muscle cells of guinea-pig mesenteric vessles, 673
- , effect on monosynaptic excitatory responses of cat spinal cord neurones, 373
- —, effect on release of prostaglandins  $I_2$ ,  $E_2$  and  $F_{2\alpha}$  from perfused mesenteric arterial bed of rabbit, 89
- —, effect on vas deferens of immature rats, 527P
- -, effects in rat aorta and mesenteric arteries, 583P
- , electrical stimulation-evoked release from hypothalamus, effect of apomorphine and pergolide, 497P
- -- , endogenously released and exogenously administered, effect of prazosin blockade, 123P

- high enzyme discharge potency, 271
- , induction of concentration-dependent contractile response of goat isolated pulmonary arteries, 233
- , induction of contractions, effect of bencyclan and nimodipine in rabbit isolated aortic strip or arterial rings, 582P
- , induction of contractions by, inhibition by chlorbutol, 101
- , induction of increases in perfusion pressure in isolated perfused kidney, 189P
- —, induction of increases in prostaglandin  $E_2$  and  $F_{2\alpha}$  synthesis in rat cerebral cortex via a  $\beta$ -adrenoceptor, 525P
- , induction of motor responses in rat anococcygeus muscle, effect of ethanol, 528P
- , induction of tone in arterial preparations, relaxation by inhibitory extract from bovine retractor penis muscle, 365
- -, inhibition by N-methyl-benzylamine of uptake, 173P
- , inhibition of transmurally-stimulated gastric fundus of the rat, 537P
- -, lack of effect of gender on rat aorta responses to, 10
- , post-synaptic-receptor mediated responses to, effect of indapamide, 172P
- –, potentiation by haloalkylamines on guinea-pig trachealis in relation to α-adrenoceptor blocking ability on rat anococcygeus, 531P
- , pressor actions in chickens after feeding with furazolidone, 555P
- , pressor dose-response curves to, effect of prazosin, phentolamine or yohimbine, 119P
- , pressor response, resistance to prazosin blockade in vivo, 121P
- , production of dose-dependent increase in perfusion pressure under basal conditions, in isolated perfused stomach, 139P
- , reduction of contraction of ileal longitudinal muscle of guinea-pig elicited by muscarine, 225
- , responses in the bisected rat vas deferens, effect of magnesium ion free Krebs solution, 564P
- , role of release in potassium contractures in rat isolated vas deferens, 143P
- , varying doses produce contraction and relaxation of stomach smooth muscle strips, 558P
- -- vasoconstrictor responses of rabbit hind limb, effect of rauwolscine, prazosin and coryanthine, 120P
- [3H]-noradrenaline, electrical stimulation-evoked release from rat cortex and rabbit hypothalamus, effect of amphetamine, tyramine and amfonelic acid, 499P
- -, liberation from platelets with or without reserpine, 349
- , no reduction by histamine of stimulated overflow, 171P
- , potassium-evoked release from mouse vas deferens, inhibition by opiates, effect of changes of extracellular sodium ion concentration, 529p
- Noradrenergic nerve endings, of rabbit hypothalamus, location of presynaptic dopamine-like inhibitory receptors, 497P
- Norethisterone oenanthate, enzymic cleavage in plasma of rabbit, rat, guinea-pig, dog, goat and human and in tissue of rabbit and human, 538P
- Normorphine, inhibition of release of [<sup>3</sup>H]-noradrenaline from mouse vas deferens, effect of changes of extracel-

lular sodium ion concentration, 529P

- Nucleus accumbens, elevated homovanillic acid concentrations following capsaicin injection into substantia nigra, 493P
- Nucleus mesencephalicus profundus, administration of dopamine or apomorphine, production of ipsilateral head-neck deviation and stereotyped head-neck movements, 124P
- Nucleus reticularis gigantocellularis, electrolytic lesions of, effect on amphetamine- and apomorphine-induced circling, 492P
- Nucleus spiroformis lateralis, administration of apomorphine, induction of stereotyped behaviour, 124P
- Nucleus tegmenti pedunculopontinus, kainic acid lesions, effect on amphetamine and apomorphine-induced circling, 492P

#### o

# 9a, 12a-Octadecadiynoic acid see Ro3-1314

- Oestradiol-17β, uterotrophic responses, modification by mepyramine and prostaglandin synthesis inhibitors in rat, 550P
- Oestrogen, lack of increase in response of rat and rabbit aorta to U46619, 10
- Oestrone sulphate, intestinal absorbtion in rat, 541P
- [3H]-oestrone sulphate, incubation with rat faeces, metabolism to oestrone or oestradiol, 541P
- Oligomycin, effect on inhibition of state 3 respiration and on diflunisal-stimulated adenosine triphophatase in rat liver mitochondria, 552P
- Olive oil, effect on bile flow, bile composition and hepatic HMGR activity in rats, 104P
- **Opiate receptor binding,** presence in rat small intestine together with potent interfering factor, 147P
- Opiate receptors, brain, spinal cord and central nervous system, occupation by lofentanil in rat, 487P
- , in carotid body, site of action of leucine- and methionine-enkephalin to suppress chemoreceptor activity in cats, 544P
- Opiates, inhibition of release of [3H]-noradrenaline from mouse vas deferens, effect of changes of extracellular sodium ion concentrations, 529P
- (+)-Opioid isomers, production of pharmacologically distinct CNS effects, 245
- **Opioids,** increase in activity in rat pituitary following the administration of sulpiride, 155P
- **Optic ventricle,** administration of apomorphine, induction of stereotyped behaviour, 124P
- Orciprenaline, determination of dissocation constants and relative efficacy on guinea-pig isolated atrium using an irreversible  $\beta$ -adrenoceptor antagonist, 635
- —, effect on synthesis of prostaglandin  $E_2$  and  $F_{2\alpha}$  by rat cerebral cortex, 525P
- , inotropic and chronotropic response of guinea-pig isolated atrium, 635
- **Ornithine decarboxylase,** rise in activity following dexamethasone administration, 182P
- Oscillating viscometer, evaluation of damage to DNA by mutagens and carcinogens, 186P
- Oscillatory current, pharmacological study in cardiac Purkinje fibres, 117P

- Ouabain, age-related cardiotoxic and inotropic effects on atria isolated from rabbits, 263
- , antagonism of [3H]-ouabain specific binding to membranes, 31
- -- , catecholamine secretory effects in bovine isolated chromaffin cells, 31
- --- , effect on actions of noradrenaline in guinea-pig ileum, 201
- --- , effect on excitatory actions of vasopressin or noradrenaline in smooth muscle cells of guinea-pig mesenteric vessels, 673
- -, effect on rat gastric mucosal potential difference, 562P
- , effect on rate of incorporation of [<sup>14</sup>C]-serine into phospholipid in guinea-pig ileum, 397
- , effect on recovery of spontaneous activity of smooth muscle after cis-2-methyl-4-dimethylaminomethyl-1,3-dioxolane methiodide treatment, 609
- , effect on resting output and tissue content of acetylcholine in rat diaphragm preparation, 461
- , partial inhibition of sodium, potassium dependent, magnesium activated adenosine triphosphatase activity in semipurified plasma membranes, 31
- , specific binding sites, interaction with potassium in guinea-pig heart microsomes, 513P
- [3H]-ouabain, binding to plasma membranes, correlation with catecholamine secretion from bovine isolated chromaffin cells, 31
- Outward current, effect of 4-aminopyridine and caesium in cardiac Purkinje fibres, 117P
- 1-(5'Oxohenyl-3-methyl-7-propylxanthine see HWA 285 Oxotremorine, induction of tremor, effect of binodaline or imipramine in mice, 573P
- Oxotremorine-M, action on membrane potential, potassium efflux, and contraction of longitudinal muscle of guinea-pig intestine, 319
- **3-Oxotriazolo [4,3b] pyridazine,** effect on blood pressure and arterial smooth muscle, 188P
- Oxprenolol, inhibition of lymphocyte capping and transformation, 69
- , prevention of hypotensive response to bromocriptine in spontaneously hypertensive rats, 419
- Oxymetazoline, effect on synthesis of prostaglandin  $E_2$  and  $F_{2\alpha}$  by rat cerebral cortex, 525P
- effect on vas deferens of immature rats, 527P
- Oxytocin, effect on membrane and contractile properties of smooth muscle cells of guinea-pig mesenteric vessels, 673
- Oxytocin (Commercial preparation), inhibitory effect, studied in rat vas deferens, 101

P

- P388 lymphocytic leukaemia, action of dimethyltriazenes, 107P
- Pacemaker current, effect of 4-aminopyridine and caesium, in cardiac Purkinje fibres, 117P
- **Pancuronium,** effect on paraoxon-induced twitch potentiation in untreated and dithiothreitol treated rat diaphragms, 545P
- **Papaverine**, effect on guinea-pig central and peripheral airways smooth muscle *in vitro*, 533P
- Papillary muscle, isolated guinea-pig, positive inotropic

- effect of imipromidine, 197
- Paraoxon, induction of twitch potentiation, effect of acetylcholine antagonists in rat isolated diaphragm preparation, 545P
- **Parasympathectomy,** effect on secretory response of parotid gland to acetyl- $\beta$ -methylcholine and adrenaline in rat, 534P
- Pargyline, effect on dopamine synthesis in striatal synaptosomes, 127P
- Parietal cortex, rat, efflux of endogenous γ-aminobutyric acid and glutamate in vivo, 149P
- **Parotid gland,** rat, amylase secretion effect of various  $\beta$ -adrenoceptor agonists, 271
- , rat, increased β-adrenoceptor density after parasympathecomy, 534P
- Partial hepatectomy, effect on plasma corticosterone and [<sup>3</sup>H]-thymidine uptake into liver in rat, 542P
- Passive avoidance conditioning, electroconvulsive shockinduced retrograde amnesia, protection by neurotoxic lesion of median raphe nucleus, 169P
- **Paw temperature**, effect of N<sup>6</sup>-2'-0-dibutyryl adenosine 3',5'-monophosphate in restrained mice, 566P
- **Pentagastrin,** effect on gastric emptying of a liquid meal in rat, 103P
- , effects on histidine decarboxylase activity and gastric acid secretion in gastric mucosa of rat, 561P
- , induction of gastric acid secretion, inhibition by ranitidine, 49
- , low concentrations, stimulation of gastric acid secretion in isolated mouse stomach, 291
- , stimulation of gastric acid secretion, effect of prostaglandin E<sub>2</sub>, 291
- **Pentetrazol,** induction of discharges form primary muscle spindle afferents from hind limb of rat, effect of trimethadione, 75
- **Pentobarbitone**, effect on bradycardia produced by oxymetazoline and clonidine in rats, 107P
- -, effect on kindled amygdaloid epilepsy in rat, 501P
- , effect on uptake and release of [<sup>3</sup>H]-dopamine from a crude striatal synaptosome preparation, 126P
- -- , reduction of (+)-amphetamine induced release of [³H]-dopamine, 126P
- **Peptide 401,** induction of histamine release in rat peritoneal mast cells, effect of lanthanide ions, 341
- **Peptides**, effect on gastric emptying of a liquid meal in rat, 103P
- , effect on tolerance to morphine-induced antinociception in the rat, 707
- **Perfusion pressure,** effects of various prostaglandins in isolated perfused stomach, 139P
- **Pergolide,** effect on stimulation-evoked release of noradrenaline from hypothalamus, 497P
- **Periaqueductal grey,** electrolytic lesions, effect on apomorphine- and amphetamine-induced circling, 492P
- , involvement in dopamine-mediated circling behaviour, 492P
- Periarterial electrical stimulation, induction of frequencyrelated increases in perfusion pressure, 189P
- Peritoneal macrophages, rat, induction of increased prostaglandin and thromboxane release by leukotrienes and lipopoly-saccharide, 389
- Peritoneal mast cells, effect of disodium cromoglycate on

calcium activated adenosine triphophatase in rat, 549P -, rat, effect of nonidet P40 in vitro 95

**Peritoneal tumour cells,** reduction in number by dimethyl-triazenes, 107P

**Phencyclidine**, effect on the intention tremor onset pressure and resting tremor onset pressure in mice, 502P

Phenelzine, DNA-damaging and mutagenic activity, 145P Phenobarbitone, effect on the intention tremor onset pressure and resting tremor onset pressure in mice, 502P

**Phenoxybenzamine,** an *in vitro* comparison of activity upon rat anococcygeus and guinea-pig trachealis, 531P

- , attenuation of the rabbit hypothalamocardioinhibitory response, 515P
- , catecholamine secretory effects in bovine isolated chromaffin cells, 31
- , effect on hypotensive and bradycardic actions of clonidine and guanabenz in rat, 580P
- -- , effect on [<sup>3</sup>H]-ouabain specific binding to membranes,
   31

**Phentolamine**, abolition of anthopleurin-B-induced relaxation of ileum of guinea-pig, 239

- , abolition of long lasting contraction caused by venom of Sydney funnel-web spider in anococcygeus, 335
- , abolition of periarterial stimulation-provoked and noradrenaline-induced increases in perfusion pressure of isolated perfused kidney, 189P
- , antagonism of contraction of smooth muscle strips in response to noradrenaline and dopamine in the presence of domperidone, 558P
- -, antagonism of phenylephrine convulsions, 171P
- , attenuation of the rabbit hypothalamocardioinhibitory response, 514P
- , effect of 5-hydroxytrytamine- and tryptamine-induced changes in core temperature in rat, 477
- , effect on excitatory actions of vasopressin in smooth muscle cells of guinea-pig mesenteric vessels, 673
- , effect on hepatic alkaline phosphatase activity in mice in vivo, 8
- , effect on hypotensive and bradycardic actions of clonidine and guanabenz in rat, 580P
- , effect on noradrenaline or dopamine inhibition of transmurally-stimulated gastric fundus of the rat, 537P
- , effect on phasic and tonic component of potassium contractures in rat isolated vas deferens, 143P
- , effect on pressor dose-response curves to intravenous phenylephrine or noradrenaline, 119P
- , inhibition of [ $^3$ H]-clonidine binding to  $\alpha_2$ -adrenoceptors, 179P
- , plus methysergide, after guanethidine, produces blockade of phasic response to 5-hydroxytryptamine, 170P
- , plus propranolol, effect on contraction and relaxation responses of stomach smooth muscle to dopamine, noradrenaline, isoprenaline and phenylephrine, 558P
- , plus propranolol, effect on noradrenaline or dopamine inhibition of transmurally-stimulated gastric fundus of the rat, 537P
- , pretreatment, effect on adrenaline-induced bradycardia and hypotension in conscious dogs, 520P
- -- , reduction of 5-hydroxytryptamine-induced contractions, 170P

6-[p-(4-Phenylacetylpiperazin-1-yl)phenyl]-4,5-dihydro-3(2H) pyridazinone see CCI 17810

Phenylbutazone, inhibition of [125I]-angiotensin II binding

in particulate fractions of bovine umbilical artery, 247

Phenylephedrine, action in guinea-pig ileum, 201

**Phenylephrine**, cardioinhibitory responses, effect of prazocin and BE 2254 in pithed rats, 586P

- —, effect in cardiovascular system, simultaneous mediation by  $\alpha_1$ -,  $\alpha_2$ -,  $\beta_1$  and  $\beta_2$ -adrenoceptors in pithed rats, 585P
- , effect on coronary artery ligation evoked cardiac arrhythmias in spinal transected dogs, 192P
- , effect on synthesis of prostaglandin  $E_2$  and  $F_{2\alpha}$  by rat cerebral cortex, 525P
- , failure to mimic adrenaline-induced hypotension and bradycardia in conscious dogs, 520P
- , hindlimb pressor response to, effect of rauwolscine, effect of rauwolscine and prazosin, 121P
- , induction of contractions, reduction by histamine, dimaprit, or phentolamine, 171P
- , induction of relaxation response of stomach smooth muscle, abolition by domperidone and propranolol plus phentolamine, 558P
- , pressor dose-response curves to, effect of prazosin, phentolamine or yohimbine, 119P
- vasoconstrictor responses of rabbit hind limb to, effect of rauwolscine, coryanthine, and prazosin, 120P
- , vasopressor dose-response curves to, effect of ranitidine in anaesthetized dog, 55

β-Phenylethylamine, uptake and deamination in isolated perfused rat lungs and lung homogenates, 731

**Phenytoin,** effect on intention tremor onset pressure and resting tremor onset pressure in mice, 502P

, effect on kindled amygdaloid epilepsy, 501P

Phorbol-12-myristate-13-acetate, stimulation of [<sup>3</sup>H]thymidine incorporation into human blood mononuclear cells, effect of cyclosporin-A and glucocorticosteroids, 588P

**Phosphatidylethanolamine**, [14C]-serine incorporation into, effect of halothane in guinea-pig ileum, 397

**Phosphatidylserine**, induce mobilization of carbohydrate reserves and in glucose accumulation in brain, 108P

 —, [14C]-serine incorporation into, effect of halothane in guinea-pig ileum, 397

Phosphodiesterase inhibitors, effect on guinea-pig central and peripheral airways smooth muscle, 533P

**Phospholipase inhibitor,** storage and steroid-induced release from rat leucocytes, 136P

**Phrenic nerve,** rat, effects of indapamide on response to electrical stimulation or noradrenaline administration, 172P

Phyllomedusin, effect on gastric emptying of conscious rat, 221

**Physalaemin,** effect on gastric emptying of conscious rat, 221

Physostigmine, effect on reflex changes in heart rate, 170P

- , potentiation of atropine enhancement of electrical stimulation-elicited increase in high affinity choline uptake, 148P
- , potentiation of contraction elicited by muscarine in ileal longitudinal muscle of guinea-pig, 225
- , reduction of effects of electrical stimulation on high affinity choline uptake in guinea-pig brain slices, 148P

Phytohaemagglutinin, stimulation of [3H]-thymidine incorporation into human blood mononuclear cells, effect of

- cyclosporin-A and glucocorticosteroids, 588P
- , induction of transformation of murine T lymphocytes, inhibition by propranolol and related compounds, 69
- Picrotoxin, effect on responses of dorsal root ganglionic neurones to SL 75 102 or γ-aminobutyric acid, 355
- , intrastriatal administration coupled with concurrent damage to the overlying sensorimotor cortex production of forepaw myoclonus in rat, 503P
- **Pilocarpine,** induction of miosis, reduction by DL-308, thioridazine and atropine, 131P
- **Pimozide**, effect on calcium-induced contractions in potassium ion-depolarized smooth muscle, 144P
- , effect on hypertensive response to bromocriptine in spontaneously hypertensive rats, 419
- , effect on hypothermic effects of intrahypothalamic injections of dopamine or N<sup>6</sup>-2'-O-dibutyryl adenosine 3'5'-monophosphate in restrained mice, 566P
- **Pineal gland,** benserazide reduction of 5-hydroxytryptamine and melatoniniy without affecting hypothalamic concentrations, 257
- **Pineal gland decarboxylase,** inhibition of activity by benserazide in rat, 257
- **Pinene,** effect on bile flow, bile composition and hepatic HMGR activity in rat, 104P
- (±)-cis-2,3-Piperidine dicarboxylic acid, plus (±)-2amino-5-phosphonovaleric acid, effect on kainic acidinduced circling in rat, 570P
- Piperoxan, effect on adrenaline-induced hypotension and bradycardia in conscious dogs, 520P
- , effect on coronary artery ligation evoked cardiac arrhythmias in spinal transected dogs, 192P
- , effect on hypotensive and bradycardic actions of clonidine and guanabenz in rat, 580P
- Pituitary extract, feminizing of hepatic lidocaine and imipramine metabolism in male rat, 553P
- **Pituitary gland,** cat intact, necessary for expression of extiatory effects of naloxone on spinal nociceptive units, 157P
- —, rat, effect of hyperprolactinemia on β-endorphin and met-enkephalin concentrations, 167P
- —, rat, increase in opioid activity following sulpiride, 155P Pituitary hormones, effect on hepatic drug metabolism in
- rat, 553P

  Placenta, rat, location of prostaglandin synthesis inhibitor in trapped blood elements, 183P
- **Plasma,** human, levels of acebutolol and *N*-acetyl acebutolol in pregnancy and after delivery, 135P
- , human, thrombin times, effect of dermatan sulphates,
   81
- , prolactin concentrations, effect of muscimol in rats with kainic lesions, 151P
- , rabbit, captopril-induced inhibition of angiotensin converting enzyme activity, 645
- , rabbit, levels of hypoxanthine and uric acid, correlation with dose of arachidonic acid required to produce a 50% fall in blood pressure, 521P
- , rabbit, noradrenaline levels, reduction after 6hydroxydopamine treatment, 119P
- , rabbit, rat, guinea-pig, dog, goat and human, enzymic cleavage of norethisterone oenanthate, 538P
- —, rat γ-aminobutyric acid concentration and prolactin secretion, influence of central nervous system derived γ-aminobutyric acid, 150P

- , rat, levels of corticosterone, effect of partial hepatectomy and reserpine on, 542P
- **Plasma amine oxidase,** pig, antibodies to, effects on porcine tissue, 146P
- Plasma membranes, [3H]-ouabain binding to, correlation with catecholamine secretion from bovine isolated chromaffin cells, 31
- Plasma proteins, bovine, in semi-synthetic diets, effect of long term feeding on liver and kidney, 181P
- **Platelet-rich plasma**, guinea-pig, with or without reserpine, liberation of catecholamines, 349
- Platelets, cat, parallel changes with brain following chronic imipramine treatment, in [<sup>3</sup>H]-imipramine binding sites, 154P
- , human, aggregation and adhesiveness, effect of aspirin or CCI 17810, 697
- , human, anomalous compartmentation of 5hydroxytryptamine, 449
- , human, comparative effects of aspirin and diflunisal on prostaglandin-synthetase, 141P
- , human, high affinity binding of [<sup>3</sup>H]-imipramine in untreated depressed patients and healthy volunteers, 152P
- , human, inhibition of aggregation by 5'-Nethylcarboxamidoadenosine, 443
- Pluronic F68, effect on elimination of fat emulsions, measurement by gamma scintigraphy, 180P
- Pokeweed mitogen, stimulation of [3H]-thymidine incorporation into human blood mononuclear cells by, effect of cyclosporin-A and glucocorticosteroids, 588P
- Polyethylene glycol 2000, changes in rat intestine after exposure, 557P
- Polymyxin B, action at frog neuromuscular junction, 41
- Polyoxyethylene (40) stearate, changes in rat intestine after exposure to, 557P
- **Polypeptides,** from sea anemone, possible dual action in guinea-pig isolated ileum and taenia caeci, 239
- **Polysynaptic excitation,** responses of cat spinal cord neurones, effect of (-)-baclofen, 373
- Porcine tissue, histochemical study using antibodies to pig plasma amine oxidase, 146P
- Portal vein, rat, effects of indapamide on response to electrical stimulation or noradrenaline administration, 172P
- **Postjunctional receptor,** production of neuromuscular blockade by polymyxin B in frog, 41
- Postsynaptic α-adrenoceptor agonists, blockade by prazosin and BE 2254 in pithed rats, 586P
- Postsynaptic α-adrenoceptors, investigation in rabbit hind limb, 120P
- Postsynaptic  $\alpha_2$ -adrenoceptors, location in smooth muscle of blood vessels, 121P
- Potassium, elevated thyrotrophin releasing hormone release from hypothalamus, 151P
- , induction of calcium dependent dopamine release, 160P
- , induction of contractions, lack of inhibition by nonsteroidal anti-inflammatory drugs in bovine isolated umbilical arteries, 247
- -- , induction of increased [14C]-dopamine synthesis and release, inhibition by α-flupenthixol and haloperidol in rat striatal synaptosomes, 427
- -, interaction with two ouabain specific binding sites in

- guinea-pig heart microsomes, 513P
- , production of contractions in isolated rat vas deferens, 143P
- , production of [<sup>3</sup>H]-noradrenaline release from mouse vas deferens, inhibition by opiates, effect of changes of extracellular sodium ion concentration, 529P
- **Potassium chloride,** effect of exposure on contractile response of smooth muscle of guinea-pig ileum to subsequent doses of potassium chloride, 609
- —, effect on release of prostaglandins  $I_2$ ,  $E_2$  and  $F_{2\alpha}$  from perfused mesenteric arterial bed of rabbit, 89
- extracellular concentrations, effect on recovery of spontaneous activity of smooth muscle after cis-2methyl-4-dimethylaminomethyl-1,3-dioxolane methiodide treatment, 609
- -- , responses in bisected rat vas deferens, effect of magnesium ion free Krebs solution, 564P
- Potassium conductance, resting, of rat skeletal muscle fibres, increase after chronic application of (-)emetine to the nerve, 112P
- Potassium efflux, of guinea-pig muscle, action of muscarinic agonists, 319
- **Potassium-free solution,** effect on actions of noradrenaline in guinea-pig ileum, 201
- Potassium ions, effect on concentration of guanosine 3',5'monophosphate in amygdala of kindled rats, 500P
- , high concentrations, effect on high affinity choline uptake in guinea-pig brain slices, 148P
- , induction of contractions by, effect of bencyclan and nimodipine in rabbit isolated aortic strip or arterial rings, 582P
- , induction of increases in perfusion pressure in isolated perfused kidney, 189P
- induction of tone in arterial preparations, relaxation by inhibitory extract from bovine retractor penis muscle, 365
- , influence on cyclic guanosine 3',5'-monophosphate concentrations in tissue slices from dopaminesupersensitive striata, 495P
- , levels in smooth muscles exposed to potassium chloride or cis-2-methyl-4-dimethylaminomethyl-1,3-dioxolane methiodide, 609
- Potassium permeability, calcium dependent increase, production of a hyperpolarization in cockroach salivary gland, 556P
- , of membrane, involvement in depolarization induced by vasopressin or noradrenaline in smooth muscle of guinea-pig mesenteric vessels, 673
- Potassium phosphate, comparison with creatinol Ophosphate on changes in pH, 578P
- Potential difference, effect of sodium replacement and ouabain in rat gastric mucosa, 562P
- **Practolol,** effect on hepatic alkaline phosphatase in mice in vivo, 8
- , inhibition of lymphocyte capping and transformation,
   69
- **Praseodymium,** effect on histamine release from rat peritoneal mast cells, 341
- Prazosin, α-adrenoceptor blocking potency, 586P
- , differential blockade of responses to endogenously released and exogenously adminisstered noradrenaline, 123P
- -, effect on hind limb pressor responses to noradrenaline,

- adrenaline and phenylephrinee, 121P
- , effect on increased mean arterial pressure and bradycardia produced by intracisternallly administered substance P in rabbits, 577P
- , effect on inhibitory effect of desimipramine on firing rate of locus coeruleus cells in rat, 498P
- --- , effect on phenylephrine-induced pressor response in pithed rats, 585P
- , effect on pressor dose-response curves to intravenous phenylephrine or noradrenaline, 1199P
- , effect on responses of vas deferens of immature rats to nerve stimulation, 527P
- —, effeect on vasoconstrictor responses to noradrenaline, α-methylnoradrenaline, phenylephrine and xylazine, 120P
- , increase of firing rate of locus coeruleus cells in rat, 498P
- **Pregnancy**, effect on adrenoceptor responsiveness in rat uterus, 530P
- Prenalterol(H133/22), high enzyme discharge potency, 271—, no modification of gastric secretion in Shay rats, 177P
- Pressor actions, in response to tyramine or noradrenaline after feeding with furzolidone, 555P
- Pressor response, to adrenaline, effect of coryanthine and rauwolscine in the presence and absence of propranolol in rat, 519P
- —, to carotid occlusion, effect of site of application on effects of γ-aminobutyric acid and glycine, 17
- , to noradrenaline, adrenaline and phenylephrine, effect of rauwolscine and prazosin, 121P
- Presynaptic α-adrenoceptors, investigation in rabit hind limb, 120P
- **Presynaptic mechanisms,** mediation of an inhibitory mode of action for neuroleptics, 427
- Presynaptic nerve endings, dopamine release, spontaneous and drug-evoked in tuberoinfundibular system, 160P
- **Primary muscle spindle afferents,** pentetrazol-induced discharges, effect of trimethadione, 75
- **Primidone,** effect on intention tremor onset pressure and resting tremor onset pressure in mice, 502P
- Procyclidine, comparison of stereospecificity at central and peripheral 'muscarine-sensitive' acetylcholine receptors, 277
- **Progesterone**, lack of increase in response of rat and rabbit aorta to U46619, 10
- **Prolactin,** and adrenocorticotrophin secreting tumour, effect on brain and pituitary concentrations of  $\beta$ -endorphin and methionine-enkephalin, 167P
- , effect on hepatic lidocaine metabolism in male rat, 553P
- —, in plasma, rise after intravenous cimetidine, 131P
- —, secretion, effect of central nervous system derived  $\gamma$ -aminobutyric acid, 150P
- , plasma concentrations, effect of muscimol in rats with kainic lesions, 151P
- **Propranolol,** abolition or reduction of relaxant responses to extrinsic nerve stimulation and field stimulation in guinea-pig, 554P
- , acute antihypertensive action in sino-aortic denervated dog, effect of intracisternal administration of 5,7dihydroxytryptamine, 411
- , antagonism of adrenaline-induced relaxations of tracheal strip in guinea-pig, 533P

- , effect on adrenaline-induced hypotension and bradycardia in conscious dogs, 520P
- , effect on coryanthine and rauwolscine changes in pressor response to adrenaline in rat, 519P
- -- , effect on development of hypertension in DOCA/salt rats, 509P
- , effect on [<sup>3</sup>H]-dihydroalprenolol binding in cat brain and platelets, 154P
- , effect on dose-response curve to phenylephrine in pithed rats, 585P
- , effect on dose-response curves for tremor and tachycardia following isoprenaline, 133P
- , effect on evoked transmitter release and on isoprenaline facilitation of evoked transmitter release in rat atrium, 191P
- , effect on excitatory actions of vasopressin in smooth muscle cells of guinea-pig mesenteric vessels, 673
- -, effect on finger tremor, 134P
- , effect on hepatic alkaline phosphatase activity in mice in vivo, 8
- , effect on inhibitory effect of desipramine on firing rate of locus coeruleus cells in rat, 498P
- , effect on intrinsic activity of labetalol on guinea-pig trachealis muscle, 532P
- , effect on nicotine-induced relaxation of guinea-pig trachealis muscle, 530P
- , effect on noradrenaline or dopamine inhibition of transmurally-stimulated gastric fundus of the rat, 537P
- , increase in firing rate of locus coeruleus cells in rat, 498P
- , inhibition of capping of anti-IgG on the surface of murine B lymphocytes, 69
- , inhibition of phytohaemagglutinin-induced transformation of murine T lymphocytes, 69
- , lack of effect on 5-hydroxytryptamine-induced venorelaxation, 233
- , lack of effect on relaxations induced by electrical stimulation or nicotine, 281
- , plus phentolamine, abolition of contraction and relaxation responses of stomach smooth muscle strip to both noradrenaline and dopamine, 558P
- , plus phentolamine, abolition of relaxation response of stomach smooth muscle to isoprenaline or phenylephrine, 558p
- , plus phentolamine, effect on noradrenaline or dopamine inhibition of transmurally-stimulated gastric fundus of the rat, 537P
- , plus prazosin, effect on phenylephrine-induced pressor response in pithed rats, 585P
- (+)-Propranolol, effect on hypotensive response to bromocriptine in spontaneously hypertensive rats, 419
- (-)-Propranolol, effect on 5-hydroxytryptamine- and tryptamine-induced changes in core temperature in rat, 477
- (±)-Propranolol, effect on increase in renal blood flow produced by dopamine receptor agonists, 507P
- , prevention of hypotensive response to bromocriptine in spontaneously hypertensive rats, 419
- [3H]-N-*n*-propylnorapomorphine, antagonism of binding by (-)N-(2-chloroethyl)norapomorphine in rat striatum, 568P
- **Prostacyclin,** concentrations, effect of acetylsalicylic acid and dipyridamole in human serum, 299

- , inhibition of myometrial formation by lipoxygenase products derived from blood elements within the decidua of rat pregnant uterus, 138P
- , potency to inhibit [<sup>3</sup>H]-prostacyclin binding and to activate adenylate cyclase, 435
- , production of small decrease in perfusion pressure by, in isolated perfused stomach, 139P
- , release, effect of nerve stimulation and of administration of noradrenaline or potassium chloride, 89
- , synthesis in rheumatoid and non-rheumatoid synovial tissue, measurement in humans, 522P
- [3H]-Prostacyclin, binding to membranes of a neuronal somatic hybrid cell line, 435
- **Prostacyclin analogues**, gastric antisecretory actions against different secretagogues in perfused whole-stomachs of rat or mouse, 291
- **Prostacyclin-like substance**, release by renin, contribution to anti-hypertensive activity of captopril, 511P
- **Prostaglandin A<sub>1</sub>**, induction of dose-dependent contractile responses of goat isolated pulmonary veins, 233
- **Prostaglandin D<sub>1</sub>**, potency to inhibit [<sup>3</sup>H]-prostacyclin binding and to activate adenylate cyclase, 435
- **Prostaglandin D<sub>2</sub>**, contractile response of rat aorta, effect of gender differences, 10
- **Prostaglandin** E<sub>1</sub>, low concentrations, inhibition of lysosomal fragility induced by histamine, 603
- , stimulation of adenylate cyclase, inhibition by adenosine 5'-diphosphate, lack of effect of 5'-N-ethylcarbamoxamidoadenosine, 443
- **Prostaglandin E<sub>1</sub>, 13,14-dihydro-,** potency to inhibit [<sup>3</sup>H]prostacyclin binding and to activate adenylate cyclase,
  435
- **Prostaglandin** E<sub>1</sub>, 8-iso-, potency to inhibit [<sup>3</sup>H]prostacyclin binding and to activate adenylate cyclase,
  435
- **Prostaglandin E2,** contractile response of rat aorta, effect of gender differences, 10
- , effect of intradermal injection on plasma exudation in rabbit, guinea-pig and rat, 483
- , gastric antisecretory actions against different secretagogues in perfused whole stomachs of rat or mouse, 293
- , inactivation, effect of clinically used dyes in rat and human lung, 715
- , increased release from rat peritoneal macrophages after incubation with leukotrienes C<sub>4</sub> and D<sub>4</sub> and lipopolysaccharide, 389
- , induction of dose-dependent contractile responses of goat isolated pulmonary veins, 233
- , low concentrations, inhibition of lysosomal fragility induced by histamine, 603
- —, noradrenaline-induced increase in synthesis of, in rat cerebral cortex via a β-adrenoceptor, 525P
- , plus leukotriene B<sub>4</sub>, effect of intradermal injection on plasma exudation in rabbit, guinea-pig and rat, 483
- potency to inhibit [³H]-prostacyclin binding and to activate adenylate cyclase, 435
- production of small decrease in perfusion pressure in isolated perfused stomach, 139P
- , release, effect of nerve stimulation, and of administration of noradrenaline or potassium chloride, 89
- -- , release from tracheal spirals of guinea-pig, effect of 5,8,11,14-eicosatetraynoic acid or Ro3-1314, 689

- —, restoration of aspirin blockade of sedative activity of  $\Delta'$ -trans-tetrahydrocannabinol, cannabis herb and water soluble fraction in mice, 649
- , restoration of cataleptic action of \( \Delta'-trans-\) hydrocannabinol which was inhibited by cannabis extracts, 401
- , suppression by aspirin in arthritic patients, 141P
- **Prostaglandin E2, 13,14-dihydro-,** potency to inhibit [<sup>3</sup>H]prostacyclin binding and to activate adenylate cyclase,
  435
- **Prostaglandin E2, 13,14-dihydro-15-oxo-,** potency to inhibit [<sup>3</sup>H]-prostacyclin binding and to activate adenylate cyclase, 435
- **Prostaglandin E<sub>2</sub>, 16,16-dimethyl-,** comparison of effects on stress ulcers and enteropooling of K11550, 178P
- Prostaglandin E<sub>2</sub>, 15-epi-, potency to inhibit [<sup>3</sup>H]prostacyclin binding and to activate adenylate cyclase, 435
- **Prostaglandin E<sub>2</sub>, 17-phenyl-,** potency to inhibit [<sup>3</sup>H]prostacyclin binding and to activate adenylate cyclase,
  435
- Prostaglandin E<sub>2</sub>, 5,6-trans-, potency to inhibit [<sup>3</sup>H]-prostacyclin binding and to activate adenylate cyclase, 435
- Prostaglandin F<sub>1</sub>, (5α) ¿,9-epoxy-16-phenoxy-, gastric antisecretory actions against different secretagogues in perfused whole-stomachs of rat or mouse, 291
- **Prostaglandin**  $F_{1\alpha}$ , potency to inhibit [ ${}^{3}H$ ]-prostacyclin binding and to activate adenylate cyclase, 435
- **Prostaglandin F**<sub>1 $\alpha$ </sub>, 6-keto-, concentrations, effect of acetylsalicylic acid and dipyridamole in human serum, 299
- , detection in rheumatoid and non-rheumatoid synovial tissue in humans, 522P
- , increased release from rat peritoneal macrophages after incubation with leukotrienes C<sub>4</sub> and D<sub>4</sub> and lipopolysaccharide, 389
- Prostaglandin F<sub>1α</sub>, 6-Ox2-, potency to inhibit [<sup>3</sup>H]prostacyclin binding and to activate adenylate cyclase,
  435
- **Prostaglandin F<sub>2\alpha</sub>**, effect of gender on contractile response of rat aorta, 10
- —, noradrenaline-induced increase in synthesis in rat cerebral cortex via  $\beta$ -adrenoceptor, 525P
- , potency to inhibit [<sup>3</sup>H]-prostacyclin binding and to activate adenylate cyclase, 435
- , induction of dose-dependent contractile responses of great isolated pulmonary veins, 233
- , production of contractions in human and monkey arterial strips, 281
- --- , production of vascular resistance in isolated perfused stomach, under basal conditions, 139P
- , release, effect of nerve stimulation and of administration of noradrenaline or potassium chloride, 89
- -- , release from tracheal spirals of guinea-pig, effect of 5,8,11,14-eicosatetraynoic or Ro3-1314, 689
- **Prostaglandin H<sub>2</sub>**, production of biphasic response, transient increase followed by small decrease in perfusion pressure in isolated perfused stomach, 139P
- 6β-Prostaglandin I<sub>1</sub>, gastric antisecretory actions against different secretagogues in perfused whole stomachs of rat or mouse, 291
- , potency to inhibit [<sup>3</sup>H]-prostacyclin binding and to activate adenylate cyclase, 435

Prostaglandin I2 see Prostacyclin

- Prostaglandin receptors, of rat aorta, gender differences, 10 Prostaglandin synthesis inhibitor, location in trapped blood elements in placental homogenates, 183P
- **Prostaglandin-synthetase,** in platelet and gastric juice, effects of aspirin and diflunisal, 141P
- **Prostaglandins,** production by rheumatoid synovial tissue, no inhibition by ICI 55897 in culture, 523P
- , comparison of effects on stress ulcers and enteropooling, 178P
- , generation by rat peritoneal leucocytes, prevention by hydrocortisone, 136P
- Proteins, acute phase reactant, lowering by ICI 55897 in treatment of arthritis, 523P
- **Ptosis,** tetrabenazine-induced, effect of binodaline or imipramine in rats, 573P
- Pulmonary veins, 5-hydroxytryptamine-induced relaxation, in goat, 233
- Pulse rate, changes after DL-308, thioridazine and atropine, 131P
- Pupil diameter, increase after DL-308, thioridazine and atropine, 131P
- Purinergic receptors, post-junctional, heterogeneity in cardiac and vascular tissue in guinea-pig, 587P
- Purines, metabolism, and sensitivity to arachidonic acid in the rabbit, 521P
- Purkinje fibres, pharmacological study of oscillatory current in heart, 117P
- Putrescine, de novo synthesis, required for dexamethasone inhibition of carrageenan paw oedema, 182P
- **Pyloric sphincter,** role in the regulation of emptying of liquids in rats, 103P
- 2-Pyridylethylamine, effect on lysosomal fragility of endothelial cells from human umbilical veins, 603
- **Pyruvate kinase**, manganese activated, effects of lithium and calcium, 506P

#### Ų

- **Quinidine,** effectiveness for prevention of early post-infarction dysrhythmias in rat, 512P
- , inhibition of lymphocyte capping and transformation,
   69
- [<sup>3</sup>H]-3'-quinuclidinyl benzilate, binding to membrane preparations of rat mast cells, 109P
- —, binding to muscarinic cholinoceptors, 179P
- **Quipazine,** antagonism of hyperphagic response to insulin or 2-deoxy-(+)-glucose, 161P
- **Quisqualic acid,** no production of circling and seizures in rat, 570P

# R

- Rabbit anti-rat IgG antiserum, effect on histamine releasing capacity of nonidet P40-treated mast cells, 95
- Radioenzymatic assay, for detection of  $N^{\alpha}$ -methylhistamine in rat, mouse and guinea-pig brain, 505P
- Ranitidine, antagonism of H<sub>2</sub>-receptor-mediated responses to histamine in guinea-pig atrium and rat uterus, 49
- , antagonism of vasodepressor and gastric secretory response to histamine in anaesthetized, 55

- , displacement of [<sup>3</sup>H]-ranitidine from guinea-pig heart membrane preparation, 547P
- , effect on [<sup>3</sup>H]-cimetidine binding and H<sub>2</sub> dependent adenylate cyclase in guinea-pig gastric mucosa, 548P
- , effect on histamine and bethanechol-induced contractions of guinea-pig ileum, 49
- , effect on some non-invasive indices of cardiac function, 131P
- -, inhibition of gastric acid secretion, 49
- , shifted dose response curve to imipromidine to right in isolated guinea-pig papillary muscle, 197
- [3H]-ranitidine, binding to guinea-pig heart membrane, 547P
- , effect on histamine-induced cyclic adenosine 3',5'monophosphate elevation in isolated rabbit gastric cell, 547P
- Rauwolscine, effect on hind limb pressor responses to noradrenaline, adrenaline and pheylephrine, 121P
- —, effect on neuronal and smooth muscle α-adrenoceptors in rat vas deferens, 526P
- , effect on pressor response to noradrenaline in the presence and absence of propranolol in rat, 519P
- —, effect on vasoconstrictor responses to noradrenaline, phenylephrine, electrical stimulation, α-methylnoradrenaline and xylazine, 120P
- , plus propranolol, diminution of diastolic blood pressure response to noradrenaline, 123P
- Rectal temperature, effect of N<sup>6</sup>-2'-O-dibutyryl adenosine 3',5'-monophosphate and dopamine or in restrained mice, 566P
- —, effect of N<sup>6</sup>-2'-O-dibutyryl adenosine 3'5'monophosphate or in restrained rat, 565P
- Recurrent laryngeal nerve, cutting, abolition of contractile and relaxant responses to extrinsic nerve stimulation in guinea-pig, 554P
- , possible extrinsic input to non-adrenergic inhibitory neurones of guinea-pig trachealis, 554P
- Reflex control, role of brain acetylcholine in conscious rat, 170P
- **Regional blood flow,** effect of HWA285 in dogs and rabbits, 723
- **Relaxation,** induced by noradrenaline or dopamine in stomach smooth muscle, effect of propranolol plus phentolamine or domperidone, 558P
- , histamine-induced in rat uterine horn, antagonism by ranitidine, 49
- **Renal blood flow,** effect of dopamine receptor agonists in guinea-pig, 507P
- **Renal vascular resistance,** effect of dopamine receptor agonists in guinea-pig, 507P
- Renal vasculature, guinea-pig, effects of dopamine receptor agonists and their antagonism by sulpiride, 507P
- Renin, release of vasodilators, contribution to antihypertensive activity of captopril, 511P
- **Renshaw cells,** cat, effect of baclofen on synaptic and chemically-induced excitation, 373
- **Reserpine**, effect on Met-enkephalin-like material concentrations in rat adrenal gland, 146P
- , effect on plasma corticosterone levels and [<sup>3</sup>H]thymidine uptake into liver in partially hepatectomized rats, 542P
- —, no abolition of secretagogic effects of β-adrenoceptor agonists, 271

- , pre-treatment, prevents production of long lasting contractions by venom of Sydney funnel-web spider in anococcygeus, 335
- **Respiration,** state 4, effect of diflunisal in mitochondria isolated from rat liver, 552P
- **Resting frequency,** of primary muscle spindle afferents, effect of trimethadione and pentetrazol in rats, 75
- Resting tremor onset pressure, effect of some anticonvulsant, sedative and anti-Parkinsonian drugs, 502P
- **Retractor penis muscle,** bovine, inhibitory extract of, action on the cardiovascular system, 365
- Rheumatoid synovial tissue, synthesis of arachidonate cyclo-oxygenase products, in humans, 522P
- **Rimiterol,** effect on synthesis of prostaglandin  $E_2$  and  $F_{2\alpha}$  by rat cerebral cortex, 525P
- RNA, cellular and viral synthesis, effect of TX 3047 in vitro, 597
- **Ro 03-7894,** antagonism of inotropic and chronotropic responses to isoprenaline and orciprenaline in isolated guinea-pig atrium, 635
- **Ro 3-1314,** effect on release of slow reacting substance of anaphylaxis from sensitized guinea-pig lung fragments, 689
- **Ro 4-1284,** liberation of labelled amines from normal platelets of guinea-pigs, 349
- Ro 4-4602 see Benserazide
- Rowachol, gallstone therapy, effect on bile flow, bile composition and hepatic HMGR activity in rats, 104P

# S

- **Salbutamol,** effect on synthesis of prostaglandin  $E_2$  and  $F_{2\alpha}$  by rat cerebral corrtex, 525P
- —, inhibition of secretion of gastric acid in Shay rats, 177P
- -, low enzyme discharge potency, 271
- Salivation, reduction by DL-308, thioridazine and atropine, 131P
- Salivary gland, cockroach, production of a hyperpolarization due to increased membrane potassium permeability by A23187, 556P
- Salivattion, production in rat by substance P, 504P
- Salmon calcitonin, mode of action on indomethacininduced gastric erosions in rat, 559P
- Saphenous vein, dog, effect of AH 19437 on concentrationeffect curves to U-46619 and dose-effect curves to thromboxane A<sub>2</sub>, 524P
- Saralsin, effect on arterial and venous blood pressure with and without lower body negative pressure in cat, 514P
- , effect on blood pressure in rabbit after sinoaortic denervation, 645
- **Scorpion venom,** effect on catecholamine secretion in adrenal gland of guinea-pig, 61
- Sea anemone (*Tealia felina*) toxin, effect on responses of guinea-pig ileum to spasmogens and haemolytic activity in human blood, 211
- Sedative activity, potency of cannabis in relation to its  $\Delta'$ -trans-tetrahydrocannabinol and cannabidiol content in mice, 649
- —, potency of Δ'-trans-tetrahydrocannabinol, cannabidiol and chloropromazine in mice, 649
- **Seizures,** induction by glutamate analogues in rats, 570P

- Semi-synthetic diets, efffect of long term feeding on kidney and liver, 181P
- Semicarbazide-resistant amine oxidase, location in outer mitochondrial envelope of rat aorta, 510P
- Semicarbazide-sensitive amine oxidase, location in plasma membrane of rat aorta, 510P
- **Sensorimotor cortex,** damage, coupled with intrastriatal administration of picrotoxin, production of forepaw myoclonus in rat, 503P
- [14C]-serine, incorporation into phospholipid in guinea-pig ileum, effect of halothane, 397
- Serine proteinases, antithrombin III-induced inhibition, effect of dermatan sulphates, 81
- **Serum,** human, effect of acetylsalicylic acid in combination with dipyridamole on the balance between prostacyclin and thromboxane, 299
- -- , rabbit, dopamine-β-hydroxylase activity after electroconvulsive shock, 567P
- , rat, inhibition of arthritis-induced rise in levels of glycoprotein by indomethacin and ICI 55897, 551P
- **Sgd 101/75**, interaction with  $\alpha$ -adrenoceptors on various tissues as full or partial agonist or antagonist, 535P
- Sinoaortic denervation, and maintenance of blood pressure, effect of captopril and saralsin in rabbit, 645
- , on blood pressure and heart rate, with or without 5,7-dihydroxytryptamine pretreatment in dogs, 411
- **Skeletal muscle,** dog and rabbit, increase in blood flow by intravenous administration of HWA 285, 723
- , rat, effects of (-)-emetine after chronic application to the nerve, 112P
- , rat, lack of effect of indapamide on responses induced by electrical stimulation, 172P
- **SKF 550,** an *in vitro* comparison of activity upon rat anococcygeus and guinea-pig trachealis, 531P
- SKF 625A, an in vitro comparison of activity upon rat anococcygeus and guinea-pig trachealis, 531P
- **SKF 38393,** effect on renal blood flow and renal vascular resistance in guinea-pig, 507P
- Skin, guinea-pig, effect of vinyl chloride on delayed hypersensitivity, 553P
- , human, mechanism of vasodilatation due to adenosine triphosphate and its metabolites, 516P
- , rabbit, effect of intradermal injection of leukotriene B<sub>4</sub> or prostaglandin E<sub>2</sub>, 483
- Skin temperature, effect of N<sup>6</sup>-2'-O-dibutyryl adenosine 3',5'-monophosphate in restrained rat, 565P SL 75 102, activity in intracellularly-recorded neurones in
- rat dorsal root ganglia, 355

  Sleeping time, halothane-induced, effect of amphetamine
- **Sleeping time,** halothane-induced, effect of amphetamine or bemigride in rats, 573P
- Small intestine, human, motor activity, effect of oral hyoscine butylbromide, 685
- , rat, presence of opiate receptor binding and a potent interfering factor, 147P
- Smooth muscle, dog, blood vessels, postsynaptic location of  $\alpha_2$ -adrenoceptors, 121P
- , dog, synaptic location of  $\alpha$ -adrenoceptors and extrasynaptic location of  $\alpha_2$ -adrenoceptors, 123P
- , guinea-pig ileum, alteration of contractility after muscarinic agonist-induced potassium ion loss, 609
- , guinea-pig ileum, contractions induced by adrenaline and noradrenaline 0-20cm from ileoceacal valve, 201
- -, guinea-pig ileum, relaxation, induced by isoprenaline,

- adrenaline, noradrenaline and ephedrine at varying distances from the ileocaecal valve, 201
- , guinea-pig stomach, dual action of catecholamines, effect of domperidone on relaxation component, 558P
- , guinea-pig taenia caeci, potassium ion-depolarized, effects of calcium ion-antagonists on calcium chloride-induced contractions, 144P
- , guinea-pig trachea, effect of calcium ion withdrawal and verapamil on excitation-contraction coupling, 175P
- , human vein, hyper-responsiveness to 5-hydroxytryptamine, evaluation using computerized venotest, test for morphine addiction, 174P
- , rat artery, effects of cadralazine and its identified metabolites, 188P
- Smooth muscle α-adrenoceptors, rat vas deferens, effect of yohimbine analogues, 526P
- Smooth muscle cells, guinea-pig mesenteric vessels, effects of vasopressin, noradrenaline or oxytocin, 673
- **Smooth muscle preparations,** rat, antagonism of responses induced by electrical stimulation by indapamide, 172P
- Social behaviour, effect of (+)-amphetamine or translypromine and L-tryptophan in spontaneously hypertensive rats. 579P
- **Sodium,** deprivation-induced exocytotic secretion of catecholamines from cat adrenal medulla: involvement of calcium influx mechanism, 305
- , effects of various concentrations on membrane potential in presence or absence of vasopressin or noradrenaline, in smooth muscle cells of guinea-pig mesenteric vessels, 673
- , low concentrations in medium, abolition of responses induced by anthopleurin-B in ileum and taenia caeci of guinea-pig, 239
- , removal from perfusion medium, induction of dopamine release, 160P
- , replacement with choline in medium, effect on rat gastric mucosal potential difference, 562P
- **Sodium bicarbonate,** comparison with creatinol Ophosphate on changes in pH, 578P
- , lack of effect on effects of caerulin or heptacholecystokinin on gastric emptying of liquid meal in rat, 103P
- **Sodium** *n***-butyrate**, effect on rectal and skin temperature in restrained rat, 565P
- **Sodium dependency,** of the effect of scorpion venom and grayanotoxin I, 61
- **Sodium ion channels,** on chromaffin cells, activation by scorpion venom and grayano-toxin I, 61
- Sodium ions, changes in extracellular concentrations, effect on the inhibition by opiates of potassium-evoked [3H]-noradrenaline release from mouse vas deferens, 529P
- **Sodium nitrate,** inotropic effects on guinea-pig aorta, effect of dipyridamole, 587P
- Sodium nitroprusside, effect on methoxamine and bariuminduced rhythmic contractions of rat vas deferens, 563P
- , induction of inhibition in bovine retractor penis muscle, effect of ethanol, 528P
- **Sodium pump,** electrogenic, location on serosal side of membrane in rat gastric mucosa, 562P
- Sodium salicylate, production of dose-dependent inhibition

of histamine-induced lysosomal fragility of endothelial cells of human umbilical veins, 603

**Solbutamol,** effect on guinea-pig central and peripheral airways smooth muscle *in vitro*, 533P

Soleus muscle, rat, action of dantrolene sodium in vivo, 665 Sotalol, inhibition of lymphocyte capping and transformation. 69

- , lack of effect on relaxations induced by electrical stimulation or nicotine, 281
- -- , reduction of liver blood flow, effects on kinetics of lignocaine in intact rat, 540P

Soybean trypsin inhibitor, reduction of inhibition of etorphine binding to rat brain microsomes by crude microsomal fractions of mesentery root, 147P

rosomal fractions of mesentery root, 147P

Spasmogenic effect, of substance P and its natural analogues

correlation with gastric emptying in conscious rat, 221 **Spinal cord,** cat, effect of baclofen on responses of neurones to stimulation in various ways, 373

- —, a-adrenoceptors, role in myocardial infarctioninduced cardiac arrhythmias, 192P
- , opiate receptors, no significant occupation by lofentanil, 487P

**Spinal nociceptive units,** naloxone excitation fails to occur in hypophysectomized cats, 157P

Spiperone, induction of desensitization, effect on human basilar artery and rat aortic strip, 581P

, receptor occupation and in vivo pharmacological effects in rat, 487P

[<sup>3</sup>H]-spiperone, antagonism of binding by (-)N-(2-chloroethyl)norapomorphine in rat striatum, 568P

- , effect of lesions produced by kainate, cortical ablation or 6-hydroxydopamine on binding in rat striatal membrane, 124P
- , specific binding, effect of chronic treatment of imipramine, 154P
- , specific binding to dopamine receptors, effect of continuous administration of trifluoperazine in rat brain, 569P
- , specific binding to striatal, post-synaptic dopamine receptors in 31 day-old hypo- and hyperthyroid rats, 125P

**Spironolactone**, hypertensive effect in DOCA/salt rats receiving propranolol, 509P

Spontaneous excitatory postsynaptic potentials, induction by 4-aminopyridine, 159P

Spontaneous firing rate, of locus coeruleus cells, effect of various adrenoceptor agonists and antagonists in rat, 498P

Spontaneously hypertensive rats, effect of cadralazine and its metabolites on aortic strip during adrenaline contraction, 188P

SQ 20881, effect on arterial and venous blood pressure with and without lower body negative pressure in cat, 514P

Stereotyped behaviours, apomorphine-induced, effect of surgical destruction of corticostriatal projections, 128P

- , effects of apomorphine microinfused into nuclei of brain stem and into the optic ventricle, 124P
- —, in response to apomorphine, enhanced by trifluoperazine administration in rat, 569P

Stereotyped head-neck movements, after administration of dopamine or apomorphine to nucleus mesencephalicus profundus, 124P

**Stereotypy,** apomorphine-induced, antagonism by low doses of spiperone, 487P

Steroid esters, dog is possible model for predicting pharmacokinetics in humans, 538P

**Steroids,** induction of phospholipase inhibitor release from rat leucocytes, 136P

**Stomach,** guinea-pig, effect of anaphylaxis on motility, 536P

- , isolated perfused rat, gastric acid secretion, inhibition by ranitidine, 49
- , rabbit, effect of emulsifiers on elimination of fat emulsions, measurement by gamma scintigraphy, 180P
- , rabbit isolated perfused, vascular actions of prostaglandins, 139P
- , rat and mouse, gastric antisecretory actions of prostaglandin E<sub>2</sub> and prostacyclin analogues against different secretagogues, 291

Strain specificity, analgesic response to morphine and D-Ala<sup>2</sup>-methionine-enkephalin in C57 and DBA mice, 166P

**Streptozotocin,** induction of diabetes, effect on glucuronyl transferase activity in rat, 539P

**Stress,** induction of gastric lesions, inhibition by K11550, potency, 178P

**Stretching,** response of primary muscle spindle afferents, effect of pentetrazol, 75

**Striatum,** dopamine receptors, occupation by spiperone, 487P

- rat, dissociation of dopamine agonist and antagonist binding sites in the rat striatum, 568P
- , rat, [³H]-dopamine release and uptake, effect of 5-hydroxytryptamine agonists and antagonists, 491P
   , rat, effect of drugs on [³H]-sulpiride binding in synaptic
- membranes, 129P

  —, rat, elevated homovanillic acid concentrations follow-
- , rat, elevated homovanillic acid concentrations following capsaicin injection into substantia nigra, 493P
- -, rat, function, cortical influences, 128P
- rat, reduction of [<sup>3</sup>H]-sulpiride binding sites following decortication or striatal kainic acid lesions, 130P
- -- , rat, relationship between dopaminergic supersensitivity and cyclic guanosine 3',5'-monophosphate, 495P

Strontium, substitution for calcium in sodium free medium, effect on catecholamine secretion from cat adrenal medulla, 305

**Strophanthidin-3-tosylate-acetate,** site-directed alkylation of sodium-potassium activated adenosine triphosphate, 25

Submaxillary gland, changes in [3H]-clonidine binding after surgical denervation of rat sub-maxillary gland, 179P

**Substance P**, and substance P-(1-9)-nonapeptide, differences between central and peripheral actions, 504P

- , depletion by capsaicin from neurones in rat substantia nigra, 493P
- -, effect on gastric emptying of conscious rat, 221
- , intracisternally administered, production of dosedependent increase in mean arterial pressure and bradycardia in rabbit, 577P

Substance P-(1-9)-nonapeptide, and substance P, differences between central and peripheral actions, 504P

Substantia nigra, rat, behavioural and biochemical studies following injection of capsaicin, 493P

-, rat, iontophoretic application of substance P and sub-

stance P-(1-9)-nonopeptide, production of dose-dependent excitation of slow onset and long duration, 504P

Sulbenicillin, biliary excretion determined in vivo and in vitro. 185P

Sulphinpyrazone, effectiveness for prevention of early postinfarction ventricular dysrhythmias in rat, 512P

**Sulpiride**, effect on hypotensive response to bromocriptine in spontaneously hypertensive rats, 419

—, increase of opioid activity in rat pituitary gland, 155P

S-sulpiride, effect on stimulation-evoked release on noradrenaline in the rabbit hypothalamus, in the presence of cocaine, 497P

(+)-Sulpiride, antagonism of effects of dopamine agonists on renal blood flow and renal vascular resistance in guinea-pig, 507P

R(+)-Sulpiride, inhibition of specific striatal binding of [3H]-sulpiride, 129P

 (-)-Sulpiride, antagonism of effects of dopamine agonists on renal blood flow and renal vascular resistance in guinea-pig, 507P

S(-)-Sulpiride, inhibition of specific striatal binding of [3H]-sulpiride, 129P

[3H]-sulpiride, effect of drugs on binding in rat striatal synaptic membranes, 129P

[3H] (-)-sulpiride, effect of lesions produced by kainate, cortical ablation and 6-hydroxydopamine on binding in rat striatal membranes, 124P

**Sulphinpyrazone,** haemodynamic effects in experimental myocardial ischaemia, 5

Suppressor activity, of lymphocytes, effect of cimetidine and histamine, in vitro, 187P

Surgical analgesia, induction in rats by lofentanil, 487P Surgical denervation effect on [3H]-clonidine binding, 179P Suxamethonium, induction of contractures of chick biventer cervicis muscle preparation, effect of metho-

hexitone, 111P

Sweating, baseline and carbachol-evoked, reduction by DL-308, thioridazine and atropine, 131P

Sympathetic ganglia, rat, presynaptic actions of γaminobutyric acid in presence of 4-aminopyridine,

Sympathetic nervous system, interaction with angiotensin during lower body negative pressure in cat, 514P

Sympathetic tachycardia, inhibition by oxymetazoline and clonidine, effect of anaesthetic agent in rats, 107P

Synacthen see Adrenocorticotrophic hormone 1-24

Synaptic inhibition, effect of baclofen in cat spinal cord neurones, 373

Synaptic pathways, stimulation, effect of baclofen on responses of spinal cord neurones, 373

Synaptosomes, dopamine synthesis, effects of dopamine, nomifensine and pargyline, 127P

 -- , rat, action of neuroleptic drugs on synthesis and release of [<sup>14</sup>C]-dopamine, 427

 , rat brain, effects of chronic nicotine administration and withdrawal on 5-hydroxytryptamine synthesis and uptake, 490P

 , hippocampal, uptake and metabolism of 5hydroxytryptophan, effect of chronic nicotine administration or withdrawal in rat, 490P

Synovial membrane, rheumatoid and non-rheumatoid,

synthesis of arachidonate cyclo-oxygenase products in humans, 522P

Syntocinon see Oxytocin

Systolic time intervals, effect of cimetidine and ranitidine, 131P

T

Tachyarrhythmias, production in rabbit right atria exposed to ouabain, 263

Tachycardia, after isoprenaline, effects of oral propranolol, atenolol and metoprolol, 133P

 , sympathetic, inhibition by oxymetazoline and clonidine, effect of anaesthetic agents, 107P

 , after noradrenaline or continuous stimulation of spinal cord, lack of effect of BE 2254 in pithed rats, 586P

Tachycardia see also Heart rate

Tachyphylaxis, production by pretreatment with adenosine triphosphate or histamine followed by injections of adenosine triphosphate or histamine in humans, 516P

Taenia caeci, guinea-pig, anthopleurin-B-induced tonic contraction followed by rhythmic relaxation, 239

Taurine, positive inotropic effects and levels in venticular strips, 115P

 , relationship between levels and calcium levels and contractile force of ventricular strips, 115P

**Temperature,** effect on [<sup>3</sup>H]-3-quinuclidinyl benzilate binding to membrane preparations of rat mast cells, 109P

, of incubation medium, effect on [14C]-serine incorporation into phospholipid in guinea-pig ileum, 393
 Terbutaline, effect on guinea-pig central and peripheral

airways smooth muscle in vitro, 533P —, effect on synthesis of prostaglandin  $E_2$  and  $F_{2\alpha}$  by rat

cerebral cortex, 525P

-, inhibition of gastric acid secretion in Shay rats, 177P

, low enzyme discharge potency, 271

Terpenes, in gallstone therapy, 104P

**Testosterone,** increase of response of rat aorta to U46619, 10

Tetanic contractions, effect of dantrolene sodium in rat, 665
Tetrabenazine, induction of ptosis, effect of binodaline or imipramine in rats, 573P

**Tetracaine,** inhibition of catecholamine secretion from cat adrenal medulla by sodium free medium, 305

2,3,7,8-Tetrachlorodibenzo-p-dioxin, persistance in liver, effect of addition of charcoal or cholic acid, 181P

**Tetramethylammonium**, action on membrane potential, potassium efflux, and contraction of longitudinal muscle of guinea-pig intestine, 319

 , effect on acetylcholine release and tissue content in rat diaphragm preparations, 461

 , induction of contractures, potentiation by methohexitone in chick biventer cervicis muscle preparation, 111P

Δ'-/trans-Tetrahydrocannabinol, cataleptic activity in relation to activity of cannabis herb and extracts after oral administration, 401

, oral sedative potency in mice, 649

**Tetrodotoxin,** abolition of γ-aminobutyric acid-induced action potentials and ESPS, 159P

- —, abolition of effects of potassium chloride on  $\gamma$ aminobutyric acid and glutamate efflux from rat cerebral cortex, 149P
- abolition of nicotine-induced relaxation of guinea-pig trachealis muscle, 530P
- -, abolition of responses induced by anthopleurin-B in ileum and taenia caeci of guinea-pig, 239
- -, abolition or suppression of electrically-induced relaxations in monkey arterial strips, 281
- -, blockade of bladder strip responses to transmural stimulation, in cat and baboon, 176P
- -, effect on contraction elicited by venom of Sydney funnel-web spider in anococcygeus, 335
- -, effect on excitatory actions of vasopressin or noradrenaline, in smooth muscle cells of guinea-pig mesenteric vessels, 673
- -, prevention of Anemonia sulcata toxin II-induced depolarization of muscle membrane and suppression of contractile activity in normal and denervated muscles,
- reversible inhibition of secretory responses induced by scorpion venom and grayanotoxin I plus scorpion venom, 61

Thalamus, morphine inhibition of electrically evoked acetylcholine release, reversal by naloxone, 158P

Theophylline, effect on acetylcholine release and tissue content in rat diaphragm preparations, 461

- -, effect on guinea-pig central and peripheral airways smooth muscle in vitro, 533P
- -, effect on responses to adenosine and sodium nitrite in guinea-pig atrium and aorta, 587P
- -, inhibition of 5'-N-ethyl-carbamoxamidoadenosineinduced increased cyclic adenosine 3',5'-monophosphate platelet levels, 443
- Thermoregulation, effect of N<sup>6</sup>-2'-O-dibutyryl adenosine 3',5'-monophosphate and dopamine in restrained mice, 566P
- -, effect of N<sup>6</sup>-2'-O-dibutyryl adenosine 3',5'-monophosphate in restrained rat, 565P
- -, effect of intrahypothalamic injection of 5-hydroxytryptamine or tryptamine in rat, 477
- 2-Thiazolyethylamine, effect on lysosomal fragility of endothelial cells from human umbilical veins, 603

Thioridazine, comparison of anticholinergic activities with DL-308 and atropine, 131P

-, effect on synthesis and release of dopamine from rat striatal synaptosomes, 427

Thorax, effect of emulsifiers on elimination of fat emulsions, measurement by gamma scintigraphy, 180P

Thrombin, induction of platelet aggregation effect of CCI 17810 and asprin, 697

-, introduction of platelet aggregation, inhibition by 5'-N-ethylcarbamoxamidoadenosine, 443

Thrombin-releasable(vesicular) compartment, thrombin-releasable compartment and extracellular medium, movement of radiolabelled 5-hydroxytryptamine, an investigation, 449

Thrombocytopenia, collagen-induced, effect of aspirin and CCI 17810 in mice, 697

Thromboxane A2, concentrations, effect of acetylsalicylic acid and dipyridamole in human serum, 299

-, dose-effect curves, effect of AH 19437 in guinea-pig lung strip, dog saphenous vein and rat aorta, 524P

- -, formation, and bronchoconstriction: effect of aspirin, 140P
- , synthesis in rheumatoid and non-rheumatoid synovial tissue, measurement in humans, 522P

**Thromboxane B<sub>2</sub>**, concentrations, effect of acetylsalicylic acid and dipyridamole in human serum, 299

- --- , detection in rheumatoid and non-rheumatoid synovial tissue in humans, 522P
- -, differential inhibition by aspirin and diflunisal in healthy patients, 141P
- -, effect of aspirin on release after acute coronary artery occlusion in dogs, 593
- , increased release from rat peritoneal macrophages, after incubation with leukotrienes C4 and D4 and lipopolysaccharide, 389

Thromboxane receptor blocking drug, AH 19437, 524P

- [3H]-thymidine, incorporation into human blood mononuclear cells stimulated by phytohaemagglutinin, pokeweed mitogen and phorbol-12-myristate-13acetate, 588P
- -, uptake into liver, effect of partial hepatectomy and reserpine in rats, 542P

Thyroid dysfunction, and striatal dopamine receptors, 125P Thyroid-stimulating hormone, effect on hepatic drug metabolism in male rat, 553P

Thyrotrophin releasing hormone, H<sub>2</sub>-mediated histamine induced release from hypothalamic synaptosomes, 151P

**Tiapride**, inhibition of specific striatal binding of [<sup>3</sup>H]sulpiride, 129P

Tissues, rabbit and human, enzymic cleavage of norethisterone oenanthate, 538P

TLX5 lymphoma, antileukaemic action of dimethyltriazenes in mice, 107P

Tolerance, differences in development, to morphine and D-ala<sup>2</sup> methionine-enkephalin in two inbred strains of mice, 166P

- -, to dextrorphan, 245
- -, to morphine-induced antinociception, effect of melanotrophin release inhibiting factor and cyclo(Leu-Gly) in rat, 707

Trachea, guinea-pig, nicotine-induced relaxation of trachealis muscle, 530P

Tracheal strip, guinea-pig, effects of constrictor and relaxant drugs, 533P

Trachealis muscle, guinea-pig, ability of labetalol to produced relaxations in vitro, 532P

guinea-pig, in vitro comparison of haloalkylamine activity with activity in anococcygeus muscle in rat, 531P

Transmitter release, effect of isoprenaline, D600 and dantrolene in rat atrium, 191P

-, from mouse neuromuscular junction, effect of Anemonia sulcata toxin II, 546P

Transmitters, releasing action of nicotine, 530P

Transmural electrical stimulation, induction of contractions, inhibition by noradrenaline or dopamine in rat gastric fundus, 537P

-, production of relaxations in monkey and human arterial strip contracted with prostaglandin  $F_{2\alpha}$ , 281

Tranylcypromine, and L-tryptophan, effect on exploratory and social behaviour in spontaneously hypertensive rats, 579P

Trapped blood elements, location of prostaglandin syn-

- thesis inhibitor in placental homogenates, 183P
- Tremor, after myocardial infarction, long term effect of β-adrenoceptor blockers, 134P
- —, isoprenaline-induced, method for assessing the effects of β-adrenoceptor blockers, 133P
- , oxotremorine-induced, effect of binodaline or imipramine in mice, 573P
- **Triamterene,** reduction of urinary magnesium excretion in conscious saline loaded rats, 285
- , no hypertensive effect in DOCA/salt rats receiving propranolol, 509P
- **Tricyclamol**, comparison of stereospecificity at central and peripheral 'muscarine-sensitive' acetylcholine receptors, 277
- Tricyclic antidepressants, lack of effect on affinity constant or maximal [3H]-imipramine in platelets of depressed patients, 152P
- Trifluoperazine, continuous administration for six months, effect on cerebral dopamine receptor characteristics in rat. 569P
- **Triflupromaxine,** effect on 5-hydroxytryptamine- and tryptamine-induced changes in core temperature in rat, 477
- **Trimethadione,** effect on pentetrazol-induced discharges of primary muscle spindle afferents from hind limb of rat, 75
- **Trypsin,** in pancreatic tissue, contamination, accounts for failure to show opiate receptor binding in small intestine, 147P
- **Tryptamine,** effect of intrahypothalamic injection on core temperature in rat, 477
- , effect on human basilar artery and rat aorta in vitro, 517P
- **D-tryptamine** receptors, non-involvement in 5-hydroxytryptamine-induced veno relaxation, 233
- **M-tryptamine receptors,** non-involvement in 5-hydroxytryptamine-induced veno-relaxation, 233
- L-Tryptophan, plus tranylcypromine, effect on exploratory and social behaviour in spontaneously hypertensive rats, 579P
- , uptake and metabolism by hippocampal synaptosomes, effects of chronic nicotine administration or withdrawal in rat, 490P
- **Tuberoinfundibular system,** spontaneous and drug-evoked release of dopamine from presynaptic nerve endings, 160P
- (+)-Tubocurarine, lack of effect on Anemonia sulcata toxin II-induced depolarization of muscle membrane in mouse, 546P
- Twitch response, anticholinesterase-induced potentiation, effect of acetylcholine antagonists in rat isolated diaphragm, 545P
- , in fast and slow muscle of rat, action of dantrolene sodium, 665
- , inhibition by adrenoceptor agonists is the same at all distances from the ileocaecal valve, 201
- TX 3047, effect on RNA and DNA synthesis in vitro, 597
- , inactivation of Herpes simplex virus by a pregnene derivative (TX 3047), 597

# Tyr-DAla-Gly-MePhe-Met (O)ol see FK 33-824

- **Tyramine**, effect on electrical-stimulation evoked [<sup>3</sup>H]-dopamine release, 499P
- —, liberation of labelled amines in normal platelets, 349

 , pressor actions in chickens after feeding with furazolidone, 555P

# U

- U-44069, production of vasoconstriction in isolated perfused stomach, 139P
- **U-46619**, effect of gender differences on contractile response of rat aorta, 10
- , concentration-effect curves, effect of AH 19437 in guinea-pig lung strip, dog sapheous vein and rat aorta, 524P
- U-46619-sensitive receptor, blockade by AH 19437, 524P
   Ulcerogenic activity, comparison of effects of aspirin and diflunisal, 141P
- **Ulcers,** stress-induced, inhibition by 11-deoxy-13,14-didehydro-16s-methyl-prostaglandin E<sub>2</sub>, 178P
- **Umbilical artery,** bovine, angiotensin receptors and their inhibition by nonsteroidal anti-inflammatory drugs, 247
- Umbilical vein, human, study of effects of inflammatory agents on lysosomal fragility and their inhibition by anti-inflammatory drugs, 603
- Uperolein, effect on gastric emptying of conscious rat, 221
  Urethane, effect on bradycardia produced by oxymetazoline and clonidine in rats, 107P
- Uric acid, plasma levels, correlation with dose of arachidonic acid required to produce a 50% fall in blood pressure in rabbit, 521P
- Urine, magnesium excretion, reduction by triamterene, amiloride and frusemide plus amiloride in conscious saline-loaded rats, 285
- —, pH and volume, effect on mexiletine elimination, 135P Uterus, pregnant rat, presence of adrenoceptors, 530P
- -, rat, action of ranitidine, 49
- , rat, oestrogen-induced blood flow, lack of effect of indomethacin, AH 7170 or mepyramine, 550P
- , rat, wet and dry weight, effect of inhibition of oestrogen-induced increase by indomethacin, AH 7170 or mepyramine in rat, 550P

#### V

- Vanadate, catecholamine secretory effects in bovine isolated chromaffin cells, 31
- no antagonism of [<sup>3</sup>H]-ouabain specific binding to membranes, 31
- Vas deferens, guinea-pig, effect of neuronal GABA uptake inhibitors on inhibitory effect of GABA on fieldstimulation, 142P
- —, guinea-pig, rat and human, effect of venom of Sydney funnel-web spider on motor transmission, 335
- , immature rat, effect of electrical nerve stimulation and of  $\alpha$ -adrenoceptor agonists, 527P
- , mouse, potassium-evoked [<sup>3</sup>H]-noradrenaline release, inhibition by opiates, effect of changes of extracellular sodium ion concentration, 529P
- , mouse and rabbit, post junctional location of histamine receptors, 171P
- rat, cadmium potentiation of responses to noradrenaline, potassium and electrical stimulation, 117P

- -, rat, effect of magnesium ion-free Krebs solution on agonist responses, 564P
- -, rat, effect of yohimbine analogues on neuronal and smooth muscle α-adrenoceptors, 526P
- -, rat, effects of calcium antagonists on drug-induced rhythmic contractions, 563P
- -, rat, effects of indapamide on responses to electrical stimulation or noradrenaline administration, 172P
- -, rat, inhibitory effect of a commercial preparation of oxytocin, 101
- rat and mouse, antagonism by benzomorphans, 13
- -, rat and mouse, effect of N-methyl-benzylamine on noradrenaline uptake, 173P
- -, rat isolated, contractile effects of 5-hydroxytryptamine, 170P
- -, rat isolated, potassium induced contractures: role of noradrenaline release and of extracellular calcium, 143P

Vascular permeability, mediation by leukotriene B<sub>4</sub> in rabbit, guinea-pig and rat, 483

- Vascular resistance, decrease after injection of prostacyclin or prostaglandin E2, in isolated perfused stomach, 139P
- production by prostaglandin F<sub>2α</sub>, in isolated perfused stomach, 139P
- Vasoconstrictor responses, induction by phenylephrine or noradrenaline, antagonism by BE 2254, 586P
- stimulation, electrical noradrenaline, methylnoradrenaline, phenylephrine and xylazine, effect of rauwolscine, coryanthine and prazosin, 120P
- Vasodepressor responses, to histamine, antagonism by H<sub>2</sub>receptor antagonists in anaesthetized dog, 55
- Vasodilatation, mechanism due to adenosine triphosphate and its metabolites in humans, 516P
- Vasodilator activity, lack of in whole animal, of inhibitory extract from bovine retractor penis muscle due to rapid inactivation in blood, 365
- Vasodilators, release by renin, contribution to antihypertensive activity of captopril, 511P
- Vasopressin, effect on membrane and contractile properties of smooth muscle cells of guinea-pig mesenteric vessels, 673
- —, inhibition of release in response to carotid occlusion by γ-aminobutyric acid and glycine, 17
- Vegetable charcoal, effect on levels of 2,3,7,8tetrachlorodibenzo-p-dioxin in liver 2 weeks after a single dose, 181P
- Veins, relaxation by 5-hydroxytryptamine, lack of effect of propranolol, indomethacin, metiamide, cimetidine, methysergide, atropine and morphine, 233
- Venom (Sydney funnel-web spider), action on autonomic neuromuscular transmission, 335
- Ventral tegmentum, stimulation of locomotor activity after injection of substance P and substance P-(1-9)nonapeptide in rat, 504P

Ventricular arrhythmias, effect of sulphinphyrazone in open chested anaesthetized dogs, 5

Ventricular contractility, lack of effect of bepridil, 114P Ventricular dysrhythmias, post-infarction, effectiveness of class 3 and 4 anti-dysrhythmic drugs in rat, 512P

Ventricular ectopic activity, following acute coronary artery occlusion, effect of aspirin in dogs, 593

Ventricular fibrillation, following acute coronary artery

- occlusion, prevention by asprin in dogs, 593
- -, protective effect of sulphinpyrazone during acute experimental myocardial ischaemia, 5
- Ventricular strips, relationship between contractile force, taurine and calcium levels, 115P
- Verapamil, antagonism of both phases of potassium contractures in rat isolated vas deferens, 143P
- -, concentration-dependent inhibition of histamine contractions in sensitized guinea-pig trachea, 175P
- -, effect on calcium-induced contractions in potassium ion-depolarized smooth muscle, 144P
- -, effectiveness for prevention of early post-infarction ventricular dysrhythmias in rat, 512P
- Vocalization, after apomorphine given into nucleus spiriformis lateralis, 124P
- Vinyl chloride, effect on delayed skin hypersensitivity to M. tuberculosis and on antigen-induced rises in leucocytes in guinea-pig, 553P

**Xylazine**, vasoconstrictor responses of rabbit hind limb. effect of rauwolscine and prazosin, 120P

Xanthine, effect on dose of arachidonic acid required to produce a fall in blood pressure in rabbit, 521P

Xanthine derivatives, effect on heart performance and regional blood flow in dogs and rabbits, 723

#### Y

Yohimbine, attenuation of the rabbit hypothalamocardioinhibitory response, 515P

- -, effect on increased mean arterial pressure and bradycardia produced by intracisternally administered substance P in rabbits, 577P
- -, effect on inhibitory effects of desipramine and clonidine on firing rate of locus coeruleus cells in rat,
- —, effect on neuronal and smooth muscle  $\alpha$ -adrenoceptors in rat vas deferens, 526P
- -, effect on pressor dose-response curves to intravenous phenylephrine or noradrenaline, 119P
- -, effect on responses of vas deferens of immature rat to electrical stimulation, 527P
- -, increase of firing rate of locus coeruleus cells in rat, 498P
- -, effect on inhibitory effect of apomorphine and pergolide in rabbit hypothalamus, 497P
- -, pretreatment, effect on adrenaline-induced bradycardia and hypotension in conscious dogs, 520P

# $\mathbf{z}$

Zimelidine, blockade of effects of morphine on plasma corticosterone and residual brain 5-hydroxyindoles,

- -, effect on brain changes of 5-hydroxyindoles and plasma corticosterone following chronic treatment with morphine in rats, 572P
- -, reduction of 5-hydroxyindoleacetic acid in all regions of brain, 572P
- Zinc cations, inhibition of catecholamine secretion from cat adrenal medulla by sodium free medium, 305

# British Journal of Pharmacology

# CONTENTS

#### **VOLUME 72 NUMBER 1 JANUARY 1981**

#### **SHORT COMMUNICATIONS**

- 8 RUSSELL, D.C. Haemodynamic effects of sulphinpyrazone in experimental myocardial ischaemia
- 8 MARY, P.L. & RAO, J. PRAKASA Type of adrenoceptors involved in induction by adrenaline of hepatic alkaline phosphatase in mice in vivo
- 10 KARANIAN, J.W., MORAN, F.M., RAMEY, E.R. & RAMWELL, P.W. Gender differences in prostaglandin receptors of rat aorta
- 3 GILLAN, MAUREEN G.C., KOSTERLITZ, HANS W. & MAGNAN, JACQUES Unexpected antagonism in the rat vas deferens by benzomorphans which are agonists in other pharmacological tests

#### **PAPERS**

- 17 FELDBERG, W. & ROCHA E. SILVA, M. Inhibition of vasopressin release to carotid occlusion by γ-amino-butyric acid and glycine
- 25 FRICKE, UWE, KLAUS, WOLFGANG & ROGATTI, MICHAEL Active site-directed alkylation of Na<sup>+</sup>-K<sup>+</sup>-ATPase by digitalis sulphonate derivatives of different lipophilicity
- 31 AUNIS, DOMINIQUE & GARCÍA, ANTONIO G. Correlation between catecholamine secretion from bovine isolated chromaffin cells and [3H]-ouabain binding to plasma membranes
- 41 DURANT, NICHOLAS N. & LAMBERT, JEREMY J. The action of polymyxin B at the frog neuromuscular iunction
- 49 DALY, M.J., HUMPHRAY, JANET M. & STABLES, R. Some in vitro and in vivo actions of the new histamine H<sub>2</sub>-receptor antagonist, ranitidine
- 55 DALY, M.J., HUMPHRAY, JANET M. & STABLES, R. Antagonism of vasodepressor and gastric secretory responses to histamine by the H<sub>2</sub>-receptor antagonists, ranitidine and cimetidine, in the anaesthetized dog
- 61 ITO, S., NAKAZATO, Y. & OHGA, A. Further evidence for the involvement of Na<sup>+</sup> channels in the release of adrenal catecholamine: the effect of scorpion venom and grayanotoxin I

- 69 ANDERTON, BRIAN H., AXFORD, JOHN S., COHN, PETER, MARSHALL, NICHOLAS J., SHEN, LI & SPRAKE, SALLY Inhibition of lymphocyte capping and transformation by propranolol and related compounds
- 75 ANGEL, A. & CLARKE, K.A. The effects of trimethadione on pentetrazol-induced discharges of primary muscle spindle afferents from the hind limb of the rat
- 81 KINDNESS, G., LONG, W.F. & WILLIAMSON, F.B. The anticoagulant activity of dermatan sulphates: evidence against the involvement of antithrombin III
- 89 PIPILI, EVA & POYSER, N.L. Effects of nerve stimulation and of administration of noradrenaline or potassium chloride upon the release of prostaglandins I<sub>2</sub>, E<sub>2</sub> and F<sub>2x</sub> from the perfused mesenteric arterial bed of the rabbit
- 95 BATCHELOR, K.W. & STANWORTH D.R. The effects of nonidet P40 on the function of rat peritoneal mast cells in vitro
- 101 BOTTING, J.H. Spurious effects of commercial preparations of oxytocin on the isolated vas deferens of the rat
- 103P PROCEEDINGS OF THE ITALIAN AND BRITISH PHARMACOLOGICAL SOCIETIES, Verona, Italy, 30th June and 1st July, 1980
- 103P BERTACCINI, G. & SCARPIGNATO, C. Effects of some cholecystokinin (CCK)-like peptides on gastric emptying of a liquid meal in the rat
- 104P BELL, G.D., CLEGG, R.J., COHN, M.R., DUGGLEBY, J.E., ELLIS, W.R., MACDONALD, I.A., MIDDLETON, B. & WHITE, D.A. Terpene therapy for gallstones—effects of individual monoterpenes on bile flow, bile composition and hepatic cholesterogenesis in the rat
- 106P CAPARROTTA, L., FASSINA, G., GAION, R.M. & TESSARI, F. Age-related changes in the antilipolytic action of nicotinic acid
- 107P CUMAN, R., GIRALDI, T., LASSIANI, L., NISI, C. & SAVA, G. Mechanism of the antileukaemic action of dimethyltriazenes in mice

- 107P ARMSTRONG, J.M., CAVERO, I. & LEFÈVRE-BORG, FRANÇOISE Comparison of the bradycardia produced by oxymetazoline and clonidine in urethane and pentobarbitone anaesthetized rats
- 108P BIGON, E., BRUNI, A., MIETTO, L., TARJAN, E.M. & TOFFANO, G. Lysophosphatidylserine-induced mast cell activation in vivo
- 109P BLANDINA, P., FANTOZZI, R., MANNAIONI, P.F. & MASINI, EMANUELA Muscarinic cholinoceptors in rat mast cells: demonstration by direct binding
- 110P BRIGONZI, A., CLEMENTI, F., TRONCONI, B. CONTI, FUMAGALLI, G. & SHER, E. Acetylcholine receptor degradation in rat myotubes in vitro: effect of myasthenic sera and of drugs used in the treatment of myasthenia gravis
- 111P ELLIOT, R.C. Studies on the interaction of methohexitone and suxamethonium or acetylcholine on the chick biventer cervicis preparation
- 112P CONTE-CAMERINO, D. & MITOLO-CHIEPPA, D. Effects of emetine on rat skeletal muscle fibres after chronic application to the nerve
- 113P CONSTANTI, A. & NISTRI, A. L-Cysteate mimics the action of L-aspartate on lobster muscle
- 114P MARSHALL, R.J. & MUIR, A.W. The antiarrhythmic haemodynamic and metabolic effects of a new antianginal agent, bepridil, in the early stages of canine acute myocardial infarction
- 115P BANDINELLI, R., FRANCONI, FLAVIA, GIOTTI, A., MARTINI, F., MONETI, G., STENDARDI, ISABELLA & ZILLETTI, LUCILLA The positive inotropic effect of taurine and calcium and the levels of taurine in ventricular strips
- 116P GIBBONS, W.R., MUGELLI, A. & VASSALLE, M. A pharmacological study of the oscillatory current in cardiac Purkinje fibres
- 116P FADLOUN, Z. & LEACH, G.D.H. Effect of chemical sympathectomy on the changes in adrenergic function caused by chronic Cd<sup>2+</sup> treatment in the rat
- 119P HAMILTON, C.A. & REID, J.L. The effect of 6-hydroxydopamine on rabbit peripheral alpha adrenoceptors in vivo and in vitro
- 120P DOCHERTY, J.R., MADJAR, H. & STARKE, K. An investigation of pre- and postsynaptic α-adrenoceptors in the rabbit hindlimb
- 121P LANGER, S.Z., MASSINGHAM, R. & SHEPPER-SON, N.B. An explanation of the resistance of the noradrenaline pressor response to prazosin blockade in vivo
- 123P LANGER, S.Z., MASSINGHAM, R. & SHEPPER-SON, N.B. Differential sensitivity to prazosin blockade of endogenously released and exogenously administered noradrenaline: possible relationship to the synaptic location of  $\alpha_1$  and the extrasynaptic location of  $\alpha_2$ -adrenoceptors in dog vascular smooth muscle

- 124P GARGIULO, G., NISTICÒ, G., ROTIROTI, D., SIL-VESTRI, R. & STEPHENSON, J.D. Stereotyped behaviour in fowls elicited by apomorphine given into the optic ventricle and into the nucleus spiroformis lateralis
- 124P MEMO, M., SPANO, P.F. & TRABUCCHI, M. Characterization and localization of dopamine-D<sub>2</sub> central receptors
- 125P TIMIRAS, P.S. & VACCARI, A. Thyroid dysfunction and striatal dopamine receptors
- 126P ALDRIDGE, S.J. & MARSDEN, C.A. Effects of pentobarbitone on uptake and release of [<sup>3</sup>H]-dopamine from a crude striatal synaptosome preparation
- 127P CERRITO, F. & RAITERI, M. Dopamine rcuptake as a major feedback mechanism controlling dopamine synthesis
- 128P BARTHOLINI, G., LLOYD, K.G., SCATTON, B. & WORMS, P. Cortical influences on striatal function in the rat
- 129P FREEDMAN, S.B. & WOODRUFF, G.N. Effect of drugs on [3H]-sulpiride binding in rat striatal synaptic membranes
- 130P JENNER, P., MARSDEN, C.D., REAVILL, C. & THEODOROU, A. Reduction of specific [3H]-sulpiride binding sites in rat striatum following decortication or striatal kainic acid lesions
- 131P BARBAT, J. & WARRINGTON, S.J. (introduced by TURNER, P.) Effects of cimetidine and ranitidine on some non-invasive indices of cardiac function
- 131P BRADSHAW, C.M., GASZNER, P. & SZABADI, E. Comparison of the peripheral anticholinergic activities of DL-308, a potential new neuroleptic, of thioridazine and atropine in healthy volunteers
- 133P PERUCCA, E., PICKLES, H., QUY, R. & RICHENS, A. A standardized method for assessing the effect of β-adrenoceptor blocking drugs upon isoprenalineinduced physiological tremor and tachycardia: a test for cardioselectivity?
- 134P BIRMINGHAM, A.T., ROLAND, J., WHARRAD, HEATHER J., WILLIAMS, E.J. & WILSON, C.G. Effects of atenolol and propranolol on finger tremor in man
- 135P JOHNSTON, A., BURGESS, C.D., HENRY, J.A., HATHWAY, N.R. & HAMER, J. Mexiletine elimination: influence of urinary pH and volume
- 135P BIANCHETTI, G., BOUTROY, M.J., DUBRUC, C., MORSELLI P. L. & VERT, P. Placental transfer and pharmacokinetics of acebutolol and N-acetyl acebutolol in the newborn
- 136P BLACKWELL, G.J., CARNUCCIO, R., DI ROSA, M., FLOWER, R.J. & PARENTE, L. Storage and steroid-induced release from rat leucocytes of a phospholipase inhibitor

- 137P CONFORTI, A., FRANCO, L., MILANINO, R. & VELO, G.P. Serum copper concentration and cerulop-lasmin activity during carrageenan foot oedema in rat
- 138P EL TAHIR, K.E.H. & WILLIAMS, K.I. Lipoxygenase products derived from blood elements within the decidua of the rat pregnant uterus inhibit myometrial prostacyclin formation
- 139P SALVATI, PATRICIA & WHITTLE, B.J.R. Vascular actions of prostaglandins on the isolated perfused stomach of the rabbit
- 140P BERTI, F., FOLCO, G.C., OMINI, C., ROSSONI, G. & VIGANÒ, T. Relationship between bronchoconstriction and thromboxane A<sub>2</sub> formation in the guinea-pig: effect of aspirin
- BIANCHI PORRO, G., CARUSO, I., CIABATTONI, G., PATRIGNANI, P., PATRONO, C. & PUGLIESE.
   F. Comparative effects of aspirin and diffunisal on platelet and gastric prostaglandin-synthetase in humans
- 142P BOWERY, N.G., SHAW, J.S., TURNBULL, M.J. & WARRINGTON, RUTH Inhibitors of neuronal GABA uptake potentiate the inhibitory effect of GABA on the field-stimulated guinea-pig vas deferens preparation
- 143P HAY, D.W.P. & WADSWORTH, R.M. Potassium contractures in the rat isolated vas deferens: the role of noradrenaline release and of extracellular calcium
- 144P SPEDDING, M. Marked differences in the effects of 'Ca<sup>2</sup>'-antagonists' on CaCl<sub>2</sub>-induced contractions in K \*-depolarized smooth muscle
- 145P BRAMBILLA, G., CAVANNA, M., DE FLORA, S., PARODI, S., PINO, A. & ROBBIANO, L. DNAdamaging and mutagenic activity of five hydrazine derivative monoamine oxidase inhibitors
- 146P BANCHELLI SOLDAINI, G. & BUFFONI, F. Histochemistry of porcine tissues using antibodies to pig plasma amine oxidase
- 146P DI GIULIO, A.M., GROPPETTI, A. & MANTE-GAZZA, P. Effect of reserpine on met-enkephalin-like material concentrations in the rat adrenal gland
- 147P MANARA, L., MONFERINI, EUGENIA & STRADA, D. Rat small intestine contains opiate receptor binding and a potent interfering factor
- 148P ANTONELLI, T., BEANI, L., BIANCHI, C., PEDATA, F. & PEPEU, G. The effects of electrical stimulation, high K<sup>+</sup> concentrations, atropine and physostigmine on high affinity choline uptake (HACU) in guinea-pig brain slices
- 149P CASAMENTI, F., CORRADETTI, R., MORONI, F. & PEPEU, G. The efflux of endogenous GABA and glutamate from the rat parietal cortex in vivo
- 150P APUD, J.A., CASANUEVA, F., CIVATI, C., COCCHI, D., LOCATELLI, V., MÜLLER, E.E. & RACAGNI, G. Central nervous system derived GABA influences plasma GABA concentrations and prolactin secretion

- 151P COCCHI, D., MARTINEZ-CAMPOS, A., MÜLLER, E.E. & ZANARDI, P. Neuroendocrine studies in a rat model mimicking Huntington's disease
- 151P BENNETT, G.W. & KEELING, M. H<sub>2</sub>-mediated histamine induced release of thyrotrophin releasing hormone (TRH) from hypothalamic synaptosomes: a neuroendocrine role for histamine
- 152P BRILEY, M., LANGER, S.Z., RAISMAN, RITA, SECHTER, D. & ZARIFIAN, E. High-affinity binding of [<sup>3</sup>H]-imipramine to human platelets: differences between untreated depressed patients and healthy volunteers
- 54P ARBILLA, SONIA, BRILEY, M., CATHALA, FRAN-COISE, LANGER, S.Z., PORNIN, CLAUDIE & RAISMAN, RITA Parallel changes in [3H]-imipramine binding sites in cat brain and platelets following chronic treatment with imipramine
- 155P FERRI, S., SCOTO, G.M. & SPADARO, C. Increase of opioid activity in the rat pituitary following the administration of sulpiride
- 156P ALGERI, S., DE SIMONI, M.G., JIRITANO, L. & MISTEREK, K. Tolerance and cross-tolerance between D-Ala² methionine-enkephalinamide and morphine on their action on motor behaviour and on the metabolism of dopamine and serotonin in some rat brain areas
- 156P BARTOLINI, A., BARTOLINI, R., BISCINI, A., GIOTTI, A. & MALMBERG, P. Investigations into baclofen analgesia: effect of naloxone, bicuculline, atropine and ergotamine
- 157P HENRY, J.L. (introduced by COMMISSIONG, J.W.) Naloxone excitation of spinal nociceptive units fails to occur in hypophysectomized cats
- 158P BEANI, L., BIANCHI, C. & SINISCALCHI, A. Naloxone reversal of morphine inhibition on electricallyevoked ACh release from guinea-pig thalamus in vitro
- 159P GALVAN, M., GRAFE, P. & TEN BRUGGENCATE, G. Presynaptic actions of GABA on rat isolated sympathetic ganglia demonstrated in the presence of 4-aminopyridine
- 160P ANNUNZIATO, L., CERRITO, F. & RAITERI, M. Dopamine: spontaneous and drug-evoked release from presynaptic nerve endings of the tuberoinfundibular system
- 161P CURRUBA, M.O., MANTEGAZZA, P., MÜLLER, E.E. & RICCIARDI, S. Effects of anorectic drugs on the hyperphagic response induced by insulin or 2-deoxy-d-glucose glucoprivation
- 162P DE CARO, G., MASSI, M. & MICOSSI, L.G. Effects of crinia-angiotensin II on drinking behaviour of rats and pigeons
- 163P ADEMBRI, G., GALLI, A., GIOTTI, A., LUZZI, S., SCOTTON, MIRELLA & ZILLETTI, LUCILLA Interaction of N-acyl and N-sulphonyl derivatives of homotaurine (3-aminopropanesulphonic acid) with GABA receptor sites and their effects on the central nervous system of the rat

- 164P ABBOTT, R. & NAHORSKI, S.R. A radioreceptor assay using [3H]-muscimol for GABA in human cerebrospinal fluid
- 165P DICKINSON, K.E.J., NAHORSKI, S.R. & WILL-COCKS, A.L. Serotonin recognition sites are labelled in cerebral cortex by the  $\beta$ -adrenoceptor antagonist [125]]-hydroxybenzylpindolol
- BRUNO, F., CARENZI, A., FRIGENI, V., IULIANO, E., PETROGALLI, R. & RACAGNI, G. Differences in the development of tolerance to morphine and D-ala<sup>2</sup>methionine-enkephalin in two inbred strains of mice
- DI GIULIO, A.M., MANTEGAZZA, P., PANERAI, 167P A. & PERALTA, E. Effect of hyperprolactinemia on β-endorphin and met-enkephalin concentrations in brain and pituitary
- Behavioral effects of chlorpromazine and chlordiazepoxide in rats: qualitative or quantitative differences? CORTESE, I., CRISTINO, R. & CUOMO, V. Behavioural effects induced by low doses of methylmercury in

167P BABBINI, M., BARTOLETTI, M. & GAIARDI, M.

- DALL'OLIO, R., GANDOLFI, O. & MONTANARO. N. Neurotoxic lesion of the median raphe nucleus protects rats from electroconvulsive shock-induced retrograde amnesia of passive avoidance conditioning
- 170P BREZENOFF, H.E., CAPUTI, A.P., CARNEY, K., LAMPA, E., MARMO, E. & ROSSI, F. Role of brain acetylcholine in reflex control in the conscious rat 170P HAY, D.W.P. & WADSWORTH, R.M. The contractile
- effects of 5-hydroxytryptamine on the rat isolated vas deferens BHALLA, P. & MARSHALL, I. Post-junctional lo-171P cation of histamine receptors in mouse and rabbit vasa
- 172P BORKOWSKI, K.R., HICKS, P.E. & MOORE, R.A. The effects of indapamide on the responses to electrical stimulation of in vitro preparations from the rat
- BUFFONI, F., CORRIAS, M. & PIRISINO, R. Inhibition of noradrenaline uptake by N-methyl-benzylamine
- DEL BIANCO, P.L., FANCIULLACCI, M. & SICU-TERI, F. Local (iris, vein) pharmacological tests in morphine addiction
- 175P BERTOLASI, V., BOREA, P.A., GILLI, G. & SACER-DOTI, M. Structure-activity relationships in histamine H, receptor antagonists
- 175P MARTORANA, M.G. & RODGER, I.W. Effects of
- Ca2+ withdrawal and verapamil on excitation-contraction coupling in sensitized guinea-pig airway smooth muscle
- 176P CRAGGS, M.D., HODSON, STEPHANIE G. & STE-PHENSON, J.D. An in vitro and in vivo comparison of the effects of cholinoceptor blockade on cat and baboon urinary bladders
- 177P BERNARDINI, C., DEL TACCA, M., MARTI-NOTTI, E. & SOLDANI, G.  $\beta_2$  Adrenoceptor agonists inhibit gastric acid secretion in Shay rats

- 178P CESERANI, R., FAUSTINI, F., LONGIAVE, D., MIZZOTTI, B. & POZZI, O. 11-deoxy-13,14-didehydro-16S-methyl-PGE, (K11550), a new antiulcer agent
- 179P BRILEY, M.S., LANGER, S.Z. & PIMOULE, CAR-MEN Changes in [3H]-clonidine binding after shortterm surgical denervation of rat submaxillary gland

D'AMICO, K.M., DAVIS, S.S., FRIER, M., HANS-

RANI, P., HARDY, J.G. & WILSON, C.G. Effects of emulsifiers on the elimination of intravenously-administered fat emulsions measured by gamma scintigraphy 181P CHIESARA, E., CLEMENTI, F., BIZZI, A., COVA, D., MARABINI, L. & DELLA TORRE, P. Long-term

180P

182P

feeding of rats with semi-synthetic diets substituted in protein components: effect on kidney and liver 181P COCCIA, P., CROCI, T. & MANARA, L. Less TCDD persists in liver 2 weeks after a single dose to mice fed

BARTHOLEYNS, J., FOZARD, J.R. & PRAKASH,

N.J. Dexamethasone inhibition of carrageenan paw

PULITI, ROBERTA, SGARAGLI, G.P. & WON-

chow with added charcoal or cholic acid

- oedema in the rat requires de novo synthesis of putres-HARROWING, P.D. & WILLIAMS, K.I. The prostaglandin synthesis inhibitor in placental homogenates is
- located in trapped blood elements 184P CORTE, LAURA DELLA, GIOVANNINI, MARIA GRAZIA, MARTINI. P., MEGAZZINI. IRENE,
- DRAK, GLORIA In vivo N-dealkylation of chlorpromazine and chlorimipramine: a single-dose kinetic study in the rat BENONI, G., BERTAZZONI-MINELLI, E., FRA-185P CASSO, M.E. & LEONE, R. Biliary excretion of  $\beta$ -lactamines in rats: in vitro and in vivo determination
- 186P BRAMBILLA, G., CARLO, P., FINOLLO, R., GIAR-ETTI, W., MARTELLI, A., PALA, M., PARODI, S. & TANINGHER, M. An extremely sensitive new method for evaluating DNA damage induced by mutagens and carcinogens
- 187P GEROSA, F., PEZZINI, A., PIZZIGHELLA, S., RIVIERA, A.P. & TRIDENTE, G. Role of agonists and antagonists of histamine lymphocyte receptors on functional expression of the immune system
- 188P CARPI, C., DORIGOTTI, L. & SEMERARO, C. Cadralazine and its identified metabolites: comparative effects on blood pressure and on arterial smooth muscle
- FADLOUN, Z. & LEACH, G.D.H. The effects of 189P Cd2+ on the responsiveness of the rat isolated perfused kidney to periarterial stimulation, noradrenaline and potassium ions
- BOUDOT, J.P., CAVERO, I. & FEUVRAY, D. 190P Further studies on the effects of diltiazem on the rabbit isolated heart perfused with an oxygenated or a hypoxic solution: correlation between ultrastructural and mechanical effects
- 191P CALLANAN, K. & KEENAN, A.K. The presynaptic effects of isoprenaline, D600 and dantrolene in rat atria
- BHARGAVA, K.P., PANT, K.K. & TANGRI, K.K. Role of x-adrenoceptors in the spinal cord in myocardial infarction-induced cardiac arrhythmias

# SHORT COMMUNICATION

197 BERTACCINI, G. & CORUZZI, G. Effect of impromidine (SK & F 92676) on the isolated papillary muscle of the guinea-pig

# **PAPERS**

- 201 BAUER, V. Distribution and types of adrenoceptors in the guinea-pig ileum: the action of  $\alpha$ -and  $\beta$ -adrenoceptor agonists
- 211 ALDEEN, SUSAN I., ELLIOTT, R.C. & SHEARDOWN, M. The partial purification and bioassay of a toxin present in extracts of the sea anemone. Tealia felina (L.)
- 221 BERTACCINI, G., DE CASTIGLIONE, R. & SCARPIGNATO, C. Effect of substance P and its natural analogues on gastric emptying of the conscious rat
- 225 OCHILLO, RICHARD F., TSAI, CHENG S. & TSAI, MEI H. Mechanism of action of muscarine on the longitudinal muscle of the guinea-pig isolated ileum
- 233 CHAND, NARESH 5-Hydroxytryptamine induces relaxation of goat pulmonary veins: evidence for the noninvolvement of M and D-tryptamine receptors
- 239 OHIZUMI, Y. & SHIBATA, S. Possible mechanism of the dual action of the new polypeptide (anthopleurin-B) from sea anemone in the isolated ileum and taenia caeci of the guinea-pig
- 245 CARNEY, JOHN M. & SIROCHMAN, VICKI L. Stereospecific dextrorphan tolerance in rats
- 247 GOODFRIEND, THEODORE L. & SIMPSON, ROBERT U. Angiotensin receptors in bovine umbilical artery and their inhibition by nonsteroidal anti-inflammatory drugs
- ARENDT, J., HO, A.K., LAUD, C., MARSTON, A., NOHRIA, V., SMITH, J.A. & SYMONS, A.M. Differential effect of benserazide (Ro4-4602) on the concentration of indoleamines in rat pineal and hypothalamus
- 263 TODA, NOBORU Cardiotoxic and inotropic effects of ouabain on atria isolated from rabbits of different ages
- 271 CARLSÖÖ, BENGT, DANIELSSON, ÅKE, HENRIKSSON, ROGER & IDAHL, LARS-ÅKE Characterization of the rat parotid β-adrenoceptor

- 277 BARLOW, R.B., DAWBARN, D. & PYCOCK, C.J. A comparison of stereospecificity at central and peripheral 'muscarine-sensitive' acetylcholine receptors: observations with the enantiomeric forms of procyclidine and tricyclamol
- 281 TODA, NOBORU Non-adrenergic, non-cholinergic innervation in monkey and human cerebral arteries
- 285 DEVANE, JOHN & RYAN, MICHAEL P. The effects of amiloride and triamterene on urinary magnesium excretion in conscious saline-loaded rats
- 291 BOUGHTON-SMITH, N.K. & WHITTLE, B.J.R. The gastric antisecretory actions of prostaglandin E<sub>2</sub> and stable prostacyclin analogues against different secretagogues in perfused wholestomachs of rat or mouse in vitro
- 299 VIINIKKA, LASSE & YLIKORKALA, OLAVI Effect of various doses of acetylsalicylic acid in combination with dipyridamole on the balance between prostacyclin and thromboxane in human serum
- 305 NISHIMURA, S., SORIMACHI, M. & YAMA-GAMI, K. Exocytotic secretion of catecholamines from the cat adrenal medulla by sodium deprivation: involvement of calcium influx mechanism
- 319 BOLTON, T.B. & CLARK, J.P. Actions of various muscarinic agonists on membrane potential, potassium efflux, and contraction of longitudinal muscle of guinea-pig intestine
- 335 HARRIS, J.B., SUTHERLAND, S. & ZAR, M.A. Actions of the crude venom of the Sydney funnelweb spider, Atrax robustus on autonomic neuromuscular transmission
- 341 PEARCE, F.L. & WHITE, J.R. Effect of lanthanide ions on histamine secretion from rat peritoneal mast cells
- 349 PLETSCHER, ALFRED Liberation of catecholamines from blood platelets
- 355 DESARMENIEN, MICHEL, FELTZ, PAUL, HEADLEY, P. MAX & SANTANGELO, FRANCESCA SL 75 102 as a y-aminobutyric acid agonist: experiments on dorsal root ganglion neurones in vitro

365 BOWMAN, ANNE, GILLESPIE, J.S. & MAR-TIN, W. Actions on the cardiovascular system of an inhibitory material extracted from the bovine retractor penis DAVIES, JOHN Selective depression of synaptic excitation in cat spinal neurones by baclofen: an iontophoretic study

## **VOLUME 72 NUMBER 3 MARCH 1981**

### SHORT COMMUNICATION

389 FEUERSTEIN, NILI, FOEGH, MARIE & RAM-WELL, PETER, W. Leukotrienes C<sub>4</sub> and D<sub>4</sub> induce prostaglandin and thromboxane release from rat peritoneal macrophages

### **PAPERS**

- 393 PATON, W.D.M. & WING D.R. Effects of halothane on the incorporation of [14C]-serine into phospholipid in the guinea-pig ileum
- 401 FAIRBAIRN, J.W. & PICKENS, JOAN T. Activity of cannabis in relation to its Δ'-trans-tetrahydrocannabinol content
- 411 MONTASTRUC, JEAN-LOUIS & MONTASTRUC, PAUL Effect of intracisternal 5,7-dihydroxytryptamine on the acute antihypertensive action of propranolol in the sino-aortic denervated anaesthetized dog
- 419 HAMILTON, T.C. Involvement of the adrenal glands in the hypotensive response to bromocriptine in spontaneously hypertensive rats
- 427 de BELLEROCHE, J.S. & BRADFORD H.F. Evidence for an inhibitory presynaptic component of neuroleptic drug action
- 435 BLAIR, I.A. & MACDERMOT, J. The binding of [3H]-prostacyclin to membranes of a neuronal somatic hybrid
- 443 CUSACK, N.J. & HOURANI, S.M.O. 5'-N-ethylcarboxamidoadenosine: a potent inhibitor of human platelet aggregation
- 449 COSTA, J.L., KIRK, K.L., MURPHY, D.L. & STARK H. Anomalous compartmentation of 5-hydroxytryptamine in intact human platelets
- 461 GUNDERSEN, CAMERON B. & JENDEN, DONALD J. Studies of the effects of agents which alter calcium metabolism on acetylcholine turnover in the rat diaphragm preparation
- 471 BHARGAVA, K.P., DIXIT, K.S. & GUPTA, Y.K. Enkephalin receptors in the emetic chemoreceptor trigger zone of the dog
- 477 COX, B., LEE, T.F. & MARTIN, D. Different hypothalamic receptors mediate 5-hydroxytryptamine- and tryptamine-induced core temperature changes in the rat

- 483 BRAY, M.A., CUNNINGHAM, F.M., FORD-HUT-CHINSON, A.W. & SMITH, M.J.H. Leukotriene B<sub>4</sub>: a mediator of vascular permeability
- 487P PROCEEDINGS OF THE BRITISH PHARMACO-LOGICAL SOCIETY, University of Aberdeen, 10th-12th September, 1980
- 487P LEYSEN, J.E. & NIEMEGEERS C.J.E. Receptor occupation and *in vivo* pharmacological effects in rats
- 488P MOSER, P.C. & WYLLIE M.G. Assessment of neurotransmitter uptake *in vivo*
- 489P COLPAERT F.C. & MAROLI A.N. Detection of electrical stimulation in the medial forebrain bundle at the level of the lateral hypothalamus: effects of haloperidol and cocaine on the intensity gradient
- 490P BALFOUR, D.J.K. & BENWELL M.E.M. The effects of chronic nicotine administration and withdrawal on 5-hydroxytryptamine synthesis and uptake by rat brain synaptosomes
- 491P COX, B., ENNIS, C. & KEMP, J.D. Inhibitory 5-hydroxytryptamine receptors located on dopamine nerve terminals in the rat striatum
- 492P JENNER, P., LEIGH, P.N., MARSDEN, C.D. & REAVILL, C. Involvement of the periaqueductal grey in dopamine-mediated circling behaviour
- 493P DAWBARN, D., HARMAR, A.J. & PYCOCK, C.J. Behavioural and biochemical studies following injection of capsaicin into the substantia nigra of the rat
- 494P LEWANDOWSKA, E.A.M. (Introduced by BRAD-LEY, P.B.) A method for screening the effects of drugs on manual co-ordination in the marmoset
- 495P TURNBULL, M.J., WATKINS, J.W. & WHEELER, H. Demonstration of withdrawal hyperexcitability following administration of benzodiazepines to rats and mice
- 495P CHIU, A., ECCLESTON, D. & PALOMO T. (Introduced by ASHTON, H.) Dopaminergic supersensitivity and cyclic GMP in rat striatum
- 497P DUBOCOVICH, MARGARITA L., GALZIN, ANNE-MARIE & LANGER, S.Z. Presynaptic dopamine like inhibitory receptors on the noradrenergic nerve endings of the rabbit hypothalamus
- 498P DRESSE, A. & SCUVÉE-MOREAU, J. Effect of various adrenoceptor agonists and antagonists on the spontaneous firing rate of rat locus coeruleus cells

499P ARBILLA, SONIA, KAMAL, LINDA A. & LANGER S.Z. Amphetamine inhibits the electrical stimulation-evoked release of [3H]-dopamine from the rabbit cau-

date nucleus

- 500P BLACKWOOD. D.H.R., MARTIN, M.J. & PALOMO, T. (Introduced by McQUEEN, J.K.) Changes in cGMP in amygdaloid kindling in rats
- 501P HOWE, S.J., SALT, T.E., TULLOCH, I. & WALTER, D.S. (Introduced by METCALF, G.) Effect of anti-grand mal drugs on kindled epilepsy in the rat
- grand mal drugs on kindled epilepsy in the rat

  502P HALSEY, M.J. & WARDLEY-SMITH, BRIDGET
  (Introduced by JOSEPH, M.H.) The high pressure
- 503P JENNER, P., LEIGH, P.N., MARSDEN, C.D. & REAVILL, C. Cortical involvement in forepaw myoclonus induced by intrastriatal administration of picrotoxin to rats

neurological syndrome: do anti-convulsants prevent it?

- 504P GROWCOTT, J.W., MORLEY, J.S., PETTER, M.N., PINNOCK, R.D., TURNBULL, M.J. & WOOD-RUFF, G.N. Differences between central and peripheral actions of substance P and substance P-(1-9)-nonapeptide
- 505P NILAM, F. & SMITH, I.R. (Introduced by BRIMBLE-COMBE, R. W.) N<sup>2</sup>-Methylhistamine was not detected
- 506P BIRCH, N.J., FOSTER, G. & KAJDA, P.K. Effects of lithium and calcium on manganese activated pyruvate kinase

in brain by a sensitive, specific radioenzymatic assay

- 507P ARMSTRONG-JAMES, M., FOX, K., KRUK, Z.L. & MILLAR, J. 'Dident' carbon fibre microelectrodes for electrophysiological and electrochemical studies
- 507P HORN, N., MARCOU, MARGARET, MUNDAY, K.A. & WOODRUFF, G.N. Effects of dopamine receptor agonists in the guinea-pig renal vasculature and their antagonism by sulpiride
- 508P LITTLE, R.A., REDFERN, W.S. & STONER, H.B. (Introduced by CARPENTER, J.) Effects of centrally-administered 6-hydroxydopamine on hypertension during muscle ischaemia in the unanaesthetized rat
- 509P BOLD, J.M., DEAN, H.G., INGHAM, S. & SPRAGGS, C. Spironolactone and the effect of propranolol in DOCA/salt treated rats
- 510P DE MEY, J. & VANHOUTTE, P.M. Removal of endothelium and arterial reactivity to acetylcholine and adenine nucleotides
- 510P DUONG, A.T., GODFRAIND, T. & WIBO, M. Subcellular localization of two forms of amine oxidase in rat aorta
- 511P MONCADA, S., MULLANE, K.M. & VANE, J.R. The release of vasodilators by renin may contribute to the anti-hypertensive activity of captopril
- 512P KANE, KATHLEEN A., McDONALD, FIONA M. & PARRATT, J.R. What pharmacological properties are necessary for the prevention of early post-infarction ventricular dysrhythmias?

- 513P DE POVER, A., GODFRAIND, T. & TONA LUTETE, N. Interaction of potassium with the two ouabain specific binding sites in guinea-pig heart microsomes
- 514P ADIGUN, S.A., CLOUGH, D., CONWAY, J. & HAT-TON, R. Interactions of angiotensin and sympathetic reflexes during lower body negative pressure (LBNP) in the cat
- 515P EVANS, M.H. & WILLIAMSON, NICOLA M. Attenuation of the rabbit hypothalamo-cardioinhibitory response by α-adrenoceptor blocking drugs
- 516P BURNSTOCK, G., COUTTS, A.A., GREAVES, M.W. & JORIZZO, J. Mechanism of vasodilatation due to adenosine triphosphate and its metabolites in humans
- 517P GODFRAIND, T. & MOREL, NICOLE Identification of the specific binding of flunarizine to rat aorta
- 517P FORSTER, CHRISTINE & WHALLEY, E.T. Comparison of various tryptamine analogues on the human basilar artery and rat aorta in vitro
- 519P FLAVAHAN, N.A. & McGRATH, J. C. An analysis of  $\alpha_1$  and  $\alpha_2$ -adrenoceptor mediated pressor effects of adrenaline
- 520P BORKOWSKI, K.R. & CLOUGH, D.P. Adrenalineinduced cardiovascular depressor effects in conscious dogs
- 521P BACQ, Z.M., DEBY, C., DEBY-DUPONT, G. & LAVERGNE, L. Sensitivity to arachidonic acid and the metabolism of purines in the rabbit
- 522P BITTENSKY, LUCILLE, CASHMAN, B., CHAYEN, J., HENDERSON, B., HIGGS, G.A., SALMON, J.A. & VANE, J.R. Synthesis of arachidonate cyclo-oxygenase products by rheumatoid and non-rheumatoid synovial tissue
- 523P BILLINGHAM, M.E.J. ICI 55897 (CLOZIC), a novel anti-arthritic agent
- 524P COLEMAN, R.A., COLLINGTON, E.W., GEISOW, H.P., HORNBY, E.J., HUMPHREY, P.P.A., KENNEDY, I., LEVY, G.P., LUMLEY, P., McCABE, P.J. & WALLIS, C.J. AH 19437, a specific thromboxane receptor blocking drug?
- 525P TEMPLETON, WILMA W. (Introduced by WOOD-RUFF, G.N.) Noradrenaline increases prostaglandin  $E_2$  and  $F_{2x}$  synthesis in rat cerebral cortex via a  $\beta$  adrenoceptor
- 526P McGRATH, J.C. Effects of yohimbine analogues on neuronal and smooth muscle α-adrenoceptors in rat vas deferens
- 527P MACDONALD, A. & McGRATH, J.C. Effects of nerve stimulation and agonist drugs on the vas deferens of immature rats
- 528P GILLESPIE, J.S., HUNTER, J.C. & McKNIGHT, A.T. The effect of ethanol on motor and inhibitory responses of the anococcygeus and bovine retractor penis muscles

- 529P HENDERSON, G. & SIM, J.A. The effect of extracellular sodium ion concentration on the action of opiates to inhibit [3H]-noradrenaline release from the mouse vas deferens
- 530P BOYLE, F.C. & DIGGES, K.G. Adrenoceptors in pregnant rat uterus
- 530P CLARK, L.A., SMALL, R.C. & TURNBULL, M.J. Nicotine-induced relaxation of guinea-pig trachealis
- 531P FOSTER, R.W. & JONES, D.W. An in vitro comparison of haloalkylamine activity upon rat anococcygeus and guinea-pig trachealis
- 532P CARPENTER, J.R. Intrinsic activity of labetalol on guinea-pig trachealis muscle in vitro
- 533P ANDERSON, A.A., ASHFIELD, D.J. & GOADBY, P. A comparison in vitro of guinea-pig central and peripheral airways smooth muscle
- 534P POAT, JUDITH A. & TEMPLETON, D. Parasympathectomy increases  $\beta$ -adrenoceptor density in the rat parotid gland
- 535P ISMAIL, S., JAHN, U. & WEETMAN, D.F. Sgd 101/75 (4(2-imidazoline-amino)-2-methyl-indazol-chlor-hydrate): a drug that can act as an agonist, partial agonist or antagonist on alpha-adrenoceptors of isolated tissues
- 536P CHADWICK, M. ANN, FRANCIS, HILARY P. & GOADBY P. The effects of anaphylaxis on stomach motility in the guinea-pig.
- 537P LEFEBVRE, R.A. & WILLEMS, J.L. Dopamine inhibition of the transmurally-stimulated gastric fundus of the rat
- 538P BACK, D.J., BRECKENRIDGE, A.M., CHAPMAN, ROSEMARY C., CRAWFORD, FRANCESCA E., ORME M.L'E. & ROWE, P.H. Metabolism of norethisterone oenanthate in vitro
- 539P HAWKSWORTH, G.M. & MORRISON, M.H. The effect of streptozotocin-induced diabetes on glucuronyl transferase activity in the rat
- 540P BENNETT, P.N., NOTARIANNI, LIDIA J. & SUPRADIST, SUMARN Effects of sotalol on lignocaine pharmacokinetics in rat
- 541P BACK, D.J., BRECKENRIDGE, A.M., CHAPMAN, C. ROSEMARY, CRAWFORD, FRANCESCA E., ORME, M.L'E. & ROWE, P.H. Intestinal absorption of oestrone sulphate in the rat
- 542P BROWN, JANETTE M. & POLLOCK, D. The effect of reserpine on plasma corticosterone levels and on the incorporation of [3H]-thymidine into regenerating liver in partially hepatectomized rats
- 543P MILTON, A.S. & TODD, DOROTHY A. The effect of cycloheximide on endogenous pyrogen fever
- 544P McQUEEN, D.S. & RIBEIRO, J.A. Comparison of the depressant effects of leucine- and methionine-enkephalin on spontaneous chemoreceptor activity in cats

- 545P CLARK, AMANDA L. & HOBBIGER, F. Effects of acetylcholine antagonists on anticholinesterase-induced twitch potentiation in the rat isolated diaphragm preparation
- 546P LEMEIGNAN, M., MOLGO, L. & TAZIEFF-DEPIERRE, F. Effects of sea Anemonia sulcata toxin it on normal and chronically denervated mammalian neuromuscular junctions
- 547P BRISTOW, D.R., HARE, J.R., HEARN, J.R. & MAR-TIN, L.E. (Introduced by BRITTAIN, R.T.) Radioligand binding studies using [<sup>3</sup>H]-cimetidine and [<sup>3</sup>H]-ranitidine
- 548P NORRIS, D.B., RISING, T.J., WARRANDER, S.E. & WOOD, T.P. (Introduced by ROBINSON, J.D.)

  [3H]-Cimetidine binding in guinea-pig gastric mucosa
- 549P EDGAR, ELAINE G., GILBERT, J.C. & WINSEY, N.J.P. Disodium cromoglycate and mast cell calcium-ATPase
- 550P MAJID, ELLISHA & SENIOR, JUDITH Modification of the uterotrophic responses to oestradiol by mepyramine and inhibitors of prostaglandin synthesis
- 551P BILLINGHAM, M.E.J., CLAGUE, R.B., MORGAN, K. & SMITH, M.N. Effect of IC1 55897 (CLOZIC\*) and indomethacin on type II collagen-induced arthritis in the rat
- 552P McDOUGALL, P., MARKHAM, A. & SWEETMAN, A.J. The effect of the nonsteroidal anti-inflammatory agent, diflunisal, on energy metabolism in mitochondria isolated from rat liver
- 553P SKETT, PAUL The effect of pituitary hormones on hepatic drug metabolism
- 553P HICKS, R. & SAHYOUN, H.A. Immunosuppressive effects of vinyl chloride monomer on delayed hypersensitivity in the guinea-pig
- 554P CLARK, L.A., SMALL, R.C. & TURNBULL, M.J. Do the recurrent laryngeal nerves provide an extrinsic input to non-adrenergic inhibitory neurones in guineapig trachealis muscle?
- 555P ALI, B.H. & BARTLET, A.L. Some actions of furazolidone in poultry
- 556P MARTIN, A.R. & MITCHELL, MARY R. (Introduced by GINSBORG, B.L.) An electrophysiological study of the effects of ionophore A23187 in an insect salivary gland
- 557P BRYAN, A.J., KAUR, RABINDER, ROBINSON, G., THOMAS, N.W. & WILSON, C.G. Changes in the rat intestine exposed to polyethylene glycol 2000 and polyoxyethylene (40) stearate
- 558P COSTALL, B., NAYLOR, R.J. & SAHYOUN, H.A. Catecholamines have a dual action on stomach strips: the relaxation component is selectively inhibited by domperidone

- 559P BATES, R.F.L., BUCKLEY, G.A. & STRETTLE, R.J. Evidence for a novel mechanism of action of salmon calcitonin on indomethacin-induced gastric erosions
- 110P CURWAIN, B.P. & TURNER, N.C. Gastric acid secretion in the rabbit isolated mucosa
- 561P BUNCE, K.T., PARSONS, M.E., PRICE, C.A. & SYKES, C.C. Histidine decarboxylase activity in the isolated gastric mucosa of the rat
- 562P BAIRD, A.W. & MAIN, I.H.M. Effects of sodium replacement and ouabain on rat gastric mucosal potential difference
- of the effects of some calcium antagonists on druginduced rhythmic contractions of the rat vas deferens 564P GIBSON, A., GINSBURG, M. & PATEL, S. The effect

563P HAY, D.W.P. & WADSWORTH, R.M. A comparison

- of Mg<sup>2+</sup>-free Krebs solution on agonist responses in the bisected vas deferens of the rat
- DASCOMBE, M.J. & PARKES, J. Effects of N<sup>6</sup>-2'-O-dibutyryl adenosine 3',5'-monophosphate on body temperature in the restrained rat
   NYEMITEI-ADDO, I. & PERTWEE, R.G. Effects of
  - intrahypothalamic injections of adenosine 3',5'-monophosphate and dopamine on thermoregulation in restrained mice

    57P DE SCHAEPDRYVER, A.F., DE SMET, F., FRAEY-
- 567P DE SCHAEPDRYVER, A.F., DE SMET, F., FRAEY-MAN, N.H. & SINGH, P. Dopamine-β-hydroxylase activity in cerebrospinal fluid and serum of rabbits after electroconvulsive shock
- 568P COSTALL, B., NAYLOR, R.J. & NEUMEYER, J.L. A dissociation of dopamine agonist and antagonist binding sites in the rat striatum
- 569P CLOW, A., GOMMEREN, W., JENNER, P., LEY-SEN, J., MARSDEN, C.D. & THEODOROU, A. Continuous administration of trifluoperazine to rats for six months only alters cerebral dopamine receptor characteristics
- 570P JENNER, P., MARSDEN, C.D. & TAYLOR, R.J. Behavioural changes induced by the unilateral intrastriatal administration of glutamate analogues in the rat
- 571P HILL, R.C., MARBACH, P. & SCHERRER, D. Method for determining the CNS penetration of enkephalin analogues in the rat
- 572P BALFOUR, D.J.K. & PLUMMER, S.M. The effects of zimelidine on changes in brain 5-hydroxyindoles and plasma corticosterone following chronic treatment with morphine
- 573P TURNBULL, M.J. & WATKINS, J.W. Rebound decrease in CNS excitability following a single dose of amphetamine
- 573P ADRIAN, R.W., ISMAIL, S. & JAHN, U. (Introduced by WEETMAN, D.F.) The pharmacological spectrum of binodaline, a novel antidepressant drug

- 575P BATES, R.F.L., BUCKLEY, G.A., EGLEN, R.M. & STRETTLE, R.J. Comparison of the analgesic effects of subcutaneous and intracerebroventricular injection of calcitonin on acetic acid-induced abdominal constrictions in the mouse
- 576P BIRCH, N.J., KAJDA, P.K. & WAREING, ROSEM-ARY Lithium and glucose utilization in human erythrocytes
- 577P PETTY, M.A. & REID, J.L. The cardiovascular effects of intracisternal Substance P in the normotensive rabbit
- 578P GODFRAIND T. & GODFRAIND-DE BECKER, ANNE Creatinol O-phosphate is a potential intracellular buffer
- 578P DONCKIER, J. & GODFRAIND T. Reduction by creatinol O-phosphate of heart CPK loss after coronary artery ligation in rats
- 579P HIGGINSON, IRENE J., MARSDEN, C.A., STAN-DEN, PENNY J. & WHITTALL, M.G. Exploratory, social and (+)-amphetamine induced behaviour in spontaneously hypertensive rats
  580P FINCH, L., HERSOM, A.S. & LEACH, G.D.H. Com-

parative studies on the cardiovascular and behavioural

- actions of guanabenz and clonidine

  581P FORSTER, CHRISTINE & WHALLEY, E.T. Spiperone contracts the human basilar arterial strip in vitropossible interaction with 5 hydroxytryntamine recen-
- one contracts the human basilar arterial strip in vitro: possible interaction with 5-hydroxytryptamine receptors?

  582P KAZDA, S. & TOWART, R. Differences in the effects
- of the calcium antagonists nimodipine (BAY e 9736) and bencyclan on cerebral and peripheral vascular smooth muscle
- 583P DIEU, D. & GODFRAIND T. A comparison of flunarizine and cinnarizine
- 584P BUCKETT, W.R. Tolerance to the inhibition by morphine of bradycardia induced by vagal stimulation in the rat
- 585P FLAVAHAN, N.A. & McGRATH, J.C. Demonstration of simultaneous  $\alpha_1$ -,  $\alpha_2$ ,  $\beta_1$  and  $\beta_2$ -adrenoceptor mediated effects of phenylephrine in the cardiovascular system of the pithed rat
- 586P HICKS, P.E. Differential α-adrenoceptor antagonism by BE 2254 (HEAT) and prazosin at pre- and postsynaptic receptors in the pithed rat
- 587P BILSKI, ALISON J., COLLIS, M.G. & PETTINGER, S.J. Heterogeneity of post-junctional purinergic receptors in cardiac and vascular tissue from guinea-pigs
- 588P GORDON, D. & NOURI, A.M.E. (Introduced by LEWIS, G.P.) Anti-proliferative effects of cyclosporin-A and glucocorticosteroids on mitogen-stimulated human blood mononuclear cells
- 590P DONEGAN, D., FISHER, J.M. & WILLIS, A.L. Predictivity and objectivity in anti-thrombotic testing procedures

#### **VOLUME 72 NUMBER 4 APRIL 1981**

#### SHORT COMMUNICATION

593 COKER, SUSAN J., LEDINGHAM, I. McA., PARRATT, J.R. & ZEITLIN, I.J. Aspirin inhibits the early myocardial release of thromboxane B<sub>2</sub> and ventricular ectopic activity following acute coronary artery occlusion in dogs

# **PAPERS**

PERBAL, BERNARD Inactivation of Herpes simplex virus by a pregnene derivative (TX 3047)

- 603 YOFFE, JOAN R. Effects of inflammatory agents on endothelial lysosomal fragility and their inhibition by anti-inflammatory drugs
- 609 JAMES-KRACKE, MARILYN R. & ROUFO-GALIS, BASIL D. Alteration of smooth muscle contractility after muscarinic agonist-induced K<sup>+</sup> loss
- 621 BURTON, M.J., COOPER, S.J. & POPPLE-WELL, D.A. The effect of fenfluramine on the microstructure of feeding and drinking in the rat
- 635 BROADLEY, KENNETH, J. & NICHOLSON, DAVID C. Dissociation constants of isoprenaline and orciprenaline and their relative efficacies on guinea-pig isolated atria determined by use of an irreversible β-adrenoceptor antagonist
- 645 PETTY, MARGARET A. & REID, J.L. Captopril and the maintenance of blood pressure after sinoaortic denervation in the rabbit
- 649 PICKENS, JOAN T. Sedative activity of cannabis in relation it its Δ'-trans-tetrahydrocannabinol and cannabidiol content
- 657 BARLOW, R.B. & WINTER, ELIZABETH A. Affinities of the protonated and non-protonated forms of hyoscine and hyoscine N-oxide for muscarinic receptors of the guinea-pig ileum and a comparison of their size in solution with that of atropine

- 665 LESLIE, G.C. & PART, N.J. The action of dantrolene sodium on rat fast and slow muscle in vivo
- 673 KARASHIMA, TSUYOSHI Effects of vasopressin on smooth muscle cells of guinea-pig mesenteric vessels
- 685 THOMPSON, D.G. & WINGATE, D.L. Oral hyoscine butylbromide does not alter the pattern of small intestinal motor activity
- 689 HITCHCOCK, MARGARET & KOKOLIS, NICHOLAS A. Arachidonic acid metabolism and modulation of in vitro anaphylaxis by 5, 8, 11, 14-eicosatetraynoic acid and 9a, 12a-octadecadiynoic acid
- 697 ELIZABETH M., GRIFFETT, KINNON, SUSAN M., KUMAR. Α., LECKER. DOROTHY, SMITH. **GILLIAN** TOMICH, E.G. Effects of 6-[p-4-phenylacetylpiperazin-1-yl) phenyl]-4,5-dihydro-3(2H)pyridazinone (CCI 17810) and aspirin on platelet aggregation and adhesiveness
- 707 BHARGAVA, HEMENDRA N. The effect of melanotrophin release inhibiting factor (MIF) and cyclo (Leu-Gly) on the tolerance to morphineinduced antinociception in the rat: a doseresponse study
- 715 BAKHLE, Y.S. Inhibition by clinically used dyes of prostaglandin inactivation in rat and human lung
- 723 HUDLICKA, O., KOMAREK, J. & WRIGHT, A.J.A. The effect of a xanthine derivative, 1-(5'oxohexyl)-3-methyl-7-propylxanthine (HWA 285), on heart performance and regional blood flow in dogs and rabbits
- 731 BEN-HARARI, R.R. & YOUDIM, M.B.H. Ontogenesis of uptake and deamination of 5-hydroxytryptamine, dopamine and β-phenylethylamine in isolated perfused lung and lung homogenates from rats