INDEX TO VOLUME 75

AUTHOR INDEX

A

- ADEAGBO, A.S.O. & OKPAKO, D.T. Restoration of vasoconstrictor responses to noradrenaline by prostaglandin E₂ after α-adrenoceptor blockade in rat isolated mesenteric artery, 49
- Adolfs, Martin J.P. & Bonta, Ivan L. Low concentrations of prostaglandin E₂ inhibit the prostacyclin-induced elevation of cyclic adenosine 3',5'-monophosphate in elicited populations of rat peritoneal macrophages, 373
- ANWAR, N. & MASON, D.F.J. Two actions of γ-aminobutyric acid on the responses of the isolated basilar artery from the rabbit, 177
- ARUNDELL, LEWIS A. & JOHNS, EDWARD J. Effect of converting enzyme inhibition on the renal haemodynamic responses to noradrenaline infusion in the rat, 553
- ASAI, FUMITOSHI, NISHIMURA, MASAKAZU, SATOH, EIKI & URAKAWA, NORIMOTO. Mechanism of cadmium-induced contraction in ileal longitudinal muscle of guinea-pig, 561
- ATLAS, DAPHNE, FRIEDMAN, ZEEV, LITVIN, YAIR & STEER, MICHAEL L. Synthesis of new haloperidol analogues and characterization of their interactions with α-adrenoceptors in rat parotid slices and human platelet membranes, 213

В

- BADAWY, A.A.-B., EVANS, C.M. & EVANS, M. Production of tolerance and physical dependence in the rat by simple administration of morphine in drinking water, 485
- BARLOW, R.B. The ionization of morphine, hydroxyamphetamine and (+)-tubocurarine chloride and a new method for calculating zwitterion constants, 503
- BEAUGHARD, M., FERRIER, M., LABRIN, C., LAMAR, J.C., LEBEOUF, J. & PIRIS, P. Studies on the bradycardia induced by bepridil, 293
- BELLEAU, B., BENFEY, B.G. & MELCHIORRE, C. Presynaptic effect of clonidine antagonized by the tetramine disulphide, benextramine, 617
- Belleau, B., Benfey, B.G., Benfey, T.J. & Melchiorre, C. Inhibition by the tetramine disulphide, benextramine, of cardiac chronotropic histamine H₂-receptor-mediated effects, 573
- Belo, Susan E. & Talesnik, Jaime. Coronary vasoconstrictor and vasodilator action of arachidonic acid in the isolated perfused heart of the rat, 269
- BENFEY, B.G. see BELLEAU, B., 573
- see Belleau, B., 617
- BENFEY, T.J. see BELLEAU, B., 573
- BISCOE, T.J. & FRY, J.P. Some pharmacological studies in the spastic mouse, 23

- BLOOM, FLOYD, LAD, PUSHKARAJ, PITTMAN, QUENTIN & ROGERS, JOSEPH. Blood alcohol levels in rats: non-uniform yields from intraperitoneal doses based on body weight, 251
- BONTA, IVAN L. see ADOLFS, MARTIN J.P., 373
- BOTTING, REGINA & MORINAN, ALUN. Involvement of 5hydroxytryptamine in the analgesic action of pethidine and morphine in mice, 579
- BOWEN, D.M. & MAREK, K.L. Evidence for the pharmacological similarity between the central presynaptic muscarinic autoreceptor and postsynaptic muscarinic receptors, 367
- BRAZELL, M.P. & MARSDEN, C.A. Differential pulse voltammetry in the anaesthetized rat, identification of ascorbic acid, catechol and indoleamine oxidation peaks in the striatum and frontal cortex, 539
- BRINK, CHARLES, DOUGLAS, JAMES S. & DUNCAN, PAMELA G. Changes in the response of guinea-pig airways in vivo and in vitro to cimetidine and propranolol during development, 531
- BROWN, C., BURNSTOCK, G., CUSACK, N.J., MEGHJI, P. & MOODY, C.J. Evidence for stereospecificity of the P₁purinoceptor, 101
- Bunce, K.T., McCarthy, J.J., Spraggs, C.F. & Stables. R. Relationship between lesion formation and permeability of rat gastric mucosa to H⁺ and other cations, 325 Burnstock, G. see Brown, C., 101

C

- CALZADO, M.C., GARCIA-CASTELLANO, J.M., MANZA-NARES, R.M., MARTINEZ, F., PRIETO, B. & TORRES, A. Effects of cimetidine on haematopoiesis in vitro. 301
- CARLSÓO, BENGT, DANIELSSON, ÅKE, HENRIKSSON, ROGER & IDAHL, LARS-ÅKE. Dissociation of β-adrenoceptorinduced effects on amylase secretion and cyclic adenosine 3', 5'-monophosphate accumulation, 633
- CARNEY, JOHN M. Effects of caffeine, theophylline and theobromine on scheduled controlled responding in rats, 451
- CARPENTIER, ROBERT G. Effects of harmala alkaliods on transmembrane potentials of guinea-pig papillary muscles, 207
- CARTER, R.J. & SHUSTER, S. The association between the melanocyte-stimulating hormone receptor and the α₂adrenoceptor on the Anolis melanophore, 169
- CHAPMAN, D.B. & WAY, E. LEONG. Modification of endorphin/enkephalin analgesia and stress-induced analgesia by divalent cations, cation chelator and an ionophore, 389
- CHIAVARELLI, M., MONCADA, S. & MULLANE, K.M. Prostacyclin can either increase or decrease heart rate depending on the basal state, 243

COATES, JILL, JAHN, U. & WEETMAN, D.F. The existence of a new subtype of α-adrenoceptor on the rat annococcygeus is revealed by Sgd 101/75 and phenoxybenzamine, 549

COLQUHOUN, D. see RANG, H.P., 151

COLQUHOUN, D. & SHERIDAN, R.E. The effect of tubocurarine competition on the kinetics of agonist action on the nicotinic receptor, 77

COPELAND, JACK G., LARSON, DOUGLAS F., ROESKE, WILLIAM R., RUSSELL, DIANE H. & WOMBLE J.R. β₂-Adrenoceptors regulate induction of myocardial ornithine decarboxylase in mice *in vivo*, 479

Costa, J.L., Kirk, K.L. & Stark, H. Uptake of 6-fluoro-5hydroxytryptamine and 4, 6-difluoro-5-hydroxytryptamine in releasable and non-releasable compartments of human platelets, 237

CREMA, A., D'ANGELO, L., FRIGO, G.M., LECCHINI, S., ONORI, L. & TONINI, M. Effects of desensitization to. adenosine-5'-triphosphate and adenosine on nonadrenergic inhibitory responses in the circular muscle of rabbit colon, 311

CUNNINGHAM, F.M. & SMITH, M.J.H. Leukotriene B₄: biological activities and the cytoskeleton, 383

CUSACK, N.J. see Brown, C., 101

- CUSACK, N.J. & HOURANI, S.M.O. Differential inhibition by adenosine or by prostaglandin E₁ of human platelet aggregation induced by adenosine 5'-O-(1-thiodiphosphate) and adenosine 5'-O-(2-thiodiphosphate), 257
- Specific but noncompetitive inhibition by 2-alkylthio analogues of adenosine 5'-monophosphate and adenosine 5'-triphosphate of human platelet aggregation induced by adenosine 5'-diphosphate, 397

CUTHBERT, ALAN W. & MARGOLIUS, HARRY S. Kinins stimulate net chloride secretion by the rat colon, 587

D

D'ANGELO, L. see CREMA, A., 311

DAMEN, FRANK J.M. & MIER, P.D. Cytochrome P-450-dependent O-dealkylase activity in mammalian skin, 123

DANIELSSON, ÅKE see CARLSÖÖ, BENGT, 633

DE BELLEROCHE, J.S. & GARDINER, I.M., Cholinergic action in the nucleus accumbens: modulation of dopamine and acetylcholine release, 359

DHAWAN, B.N., SHUKLA. R. & SRIMAL, R.C. Analysis of histamine receptors in the central thermoregulatory mechanism of *Mastomys natalensis*, 145

DOUGLAS, JAMES S. see BRINK, CHARLES, 531 DUNCAN, PAMELA G. see BRINK, CHARLES, 531

E

ELLORY, J.C. & STEWART, G.W. The human erythrocyte Cl-dependent Na-K cotransport system as a possible model for studying the action of loop diuretics, 183

Evans, C.M. see Badawy, A.A.-B., 485

EVANS, M. see BADAWY, A.A.-B. 485

EVANS, R.H., FRANCIS, A.A., JONES, A.W., SMITH, D.A.S. & WATKINS, J.C. The effects of a series of ω -phosphonic

α-carboxylic amino acids on electrically evoked and excitant amino acid-induced responses in isolated spinal cord preparations, 65

F

FITTON, A.G. & PERTWEE, R.G. Changes in body temperature and oxygen consumption rate of conscious mice produced by intrahypothalamic and intracerebroventricular injections of Δ^9 -tetrahydrocannabinol, 409

FRANCIS, A.A. see EVANS, R.H., 65

FRANCONI, FLAVIA, GIOTTI, ALBERTO, MANZINI, STEF-FANO, MARTINI, FLAVIO, STENARDI, ISABELLA & ZILLETTI, LUCILLA. The effect of taurine on high potassium- and noradrenaline-induced contraction in rabbit ear artery, 605

FRIEDMAN, ZEEV see ATLAS, DAPHNE, 213

FRIGO, G.M. see CREMA, A., 311

FRY, J.P. see BISCOE, T.J., 23

FUJIWARA, SHIGERU, ITO, YUSHI, ITOH, TAKEO, KURIYAMA, HIROSI & SUZUKI, HIKARU. Diltiazem-induced vaso-dilatation of smooth muscle cells of the canine basilar artery, 455

G

GAGE, PETER W. & SAH, PANKAJ. Postsynaptic effects of some central stimulants at the neuromuscular junction, 493

GARCIA-CASTELLANO, J.M. see CALZADO, M.C., 301

GARDINER, I.M. see DE BELLEROCHE, J.S.

GATER, P.R., JORDAN, C.C. & OWEN, D.G. Relative activities of substance P-related peptides in guinea-pig ileum and rat parotid gland, in vitro, 341

GILLESPIE, J.S., HUNTER, J.C. & McKNIGHT, A.T. The effect of ethanol on inhibitory and motor responses in the rat and rabbit anococcygeus and bovine retractor penis muscles, 189

GINTZLER, ALAN R. & SCALSI, JENNIE A. Effects of opioids on noncholinergic excitatory responses of the guinea-pig isolated ileum: inhibition of enteric substance P, 199

GINTZLER, ALAN R., ZUKIN, SUZANNE & ZUKIN, STEPHEN R. Effects of phencyclidine and its derivatives on enteric neurones, 261

GIOTTI, ALBERTO see FRANCONI, FLAVIA, 605

GODFRAIND, T. & MILLER, R.C. Actions of prostaglandin $F_{2\alpha}$ and noradrenaline on calcium exchange and contraction in rat mesenteric arteries and their sensitivity to calcium entry blockers, 229

GRIFFEN, M.M. & STEVEN, F.S. Inhibition of trypsin and papain by sodium aurothiomalate mediated by exchange reactions, 333

Н

HAMILTON, C.A., REID, J.L. & ZAMBOULIS, C. The role of presynaptic α-adrenoceptors in the regulation of blood pressure in the conscious rabbit, 417

HAMILTON, T.C. & LONGMAN, SUSAN D. A comparison of the cardiovascular and sedative actions of the α-adrenoceptor agonists, FLA-136 and clonidine, in the rat, 13

HAMON, GILLES & WORCEL, MANUEL. Mechanism of action of angiotensin II on excitation-contraction coupling in the rat portal vein, 425

HENRICKSSON, ROGER see CARLSÖÖ, BENGT, 633

HOURANI, S.M.O. see CUSACK, N.J., 257

— see Cusack, N.J., 397

HUNTER, J.C. see GILLESPIE, J.S., 189

HUTTUNEN, PIRKKO. Hypothalamic catecholamines and tolerance for severe cold in ethanol-treated guinea-pigs, 613

I

IDAHL, LARS-ÅKE see CARLSÖÖ, BENGT, 633

ILLES, P. & NORTH, R.A. Effects of divalent cations and normorphine on spontaneous excitatory junction potentials in the mouse vas deferens, 599

INVERNIZZI, R., KMIECIAK-KOLADA, K. & SAMANIN, R. Is receptor activation involved in the mechanism by which (+)-fenfluramine and (+)-norfenfluramine deplete 5-hydroxytryptamine in the rat brain? 525

ITO, YUSHI see FUJIWARA, SHIGERU, 455

ITO, YUSHI & TAJIMA, KIKUO. Dual effects of catecholamines on pre- and post-junctional membranes in the dog trachea, 433

ITOH, TAKEO see FUJIWARA, SHIGERU, 455

ITOH, TAKEO, KURIYAMA, HIROSI, & SUZUKI, HIKARU. Effects of chlorpromazine on the electrical and mechanical properties of intact and skinned muscle cells of guinea-pig mesenteric artery, 513

J

JAHN, U. see COATES, JILL, 549

Jalilian-Tehrani, Mohammad H., Karakiulakis, George, Le Blond, Christine B., Powell, Ruth, & Thomas, Patrick J. Androgen-induced sexual dimorphism in high affinity dopamine binding in the brain transcends the hypothalamic-limbic region, 37

JARROTT, BEVYN, LOUIS, WILLIAM J. & SUMMERS, ROGER J. [3 H]-guanfacine: a radioligand that selectively labels high affinity α_2 -adrenoceptor sites in homogenates of rat brain, 401

JOHNS, EDWARD J. see ARUNDELL, LEWIS A., 553

JONES, A.W. see Evans, R.H., 65

JORDAN, P.R. see GATER, P.R., 341

JUDGE, SUSAN E. & NORMAN, J. The action of general anaesthetics on acetylcholine-induced inhibition in the central nervous system of *Helix*, 353

JUORIO, A.V. The effect of γ-hydroxybutyrate on mouse striatal tyramine, dopamine and homovanillic acid, 447

K

KANE, KATHLEEN, McDONALD, FIONA, PARRAT, JAMES, TIMMER, CEES & VINK, JAN. Antiarrhythmic effects of Org 6001 in rats; correlation with plasma and tissue drug

concentrations, 319

KARAKIULAKIS, GEORGE see JALILIAN-TEHRANI, MOHAMMAD H., 37

KENDALL, T.J.G. & MINCHIN, M.C.W. The effects of anaesthetics on the uptake and release of amino acid neurotransmitters in thalamic slices, 219

KIKUO, TAJIMA see ITO, YUSHI, 433

KIRK, K.L. see COSTA, J.L., 237

KMIECIAK-KOLADA, K. see INVERNIZZI, R., 525

Kuriyama, Hiroshi see Fujiwara, Shigeru, 455

— see Iтон, Такео, 513

KUROKAWA, HIROSHI & SAKAMOTO, KIMIKO. Effects of aspirin, prednisolone and indomethacin on nephrotoxic serum nephritis in the rat, 87

L

LAD, PUSHKARAJ see BLOOM, FLOYD, 251

LARSON, DOUGLAS F. see COPELAND, JACK G., 479

LE BLOND, CHRISTINE B. see JALILIAN-TEHRANI, MOHAM-MAD H., 37

LECCHINI, S. see CREMA, A., 311

Lewis, G.P. & Watts, I.S. Prostaglandin endoperoxides, thromboxane A₂ and adenosine diphosphate in collagen-induced aggregation of rabbit platelets, 623

LITVIN, YAIR see ATLAS, DAPHNE, 213

LONGMAN, SUSAN D. see HAMILTON, T.C., 13

LOUIS, W.J., PAPANICOLAOU, JENNY, SUMMERS, R.J. & VAJDA, F.J.E. Role of central β-adrenoceptors in the control of pentylenetetrazol-induced convulsions in rats, 441

м

McCarthy, J.J. see Bunce, K.T., 325

McDonald, Fiona see Kane, Kathleen, 319

McGRIFF, JOHN C., SPOKAS, ERIC G. & WONG, PATRICK Y-K. Stimulation of renin release by 6-oxo-prostaglandin E₁ and prostacyclin, 137

McKnight, A.T. see Gillespie, J.S., 189

Mantegazaa, Paolo, Parenti, Marco, Tammiso, Remigio, Vita, Paolo, Zambotti, Fernanda & Zonta, Nerina. Modification of the antinociceptive effect of morphine by centrally administered diazepam and midazolam, 569

MANZANARES, R.M. see CALZADO, M.C., 301

MANZINI, STEFFANO see FRANCONI, FLAVIA, 605

MAREK, K.L. see BOWEN, D.M., 367

MARGOLIUS, HARRY S. see CUTHBERT, ALAN W., 587

MARSDEN, C.A. see BRAZELL, M.P., 539

MARTINEZ, F. see CALZADO, M.C., 301

Martini, Flavio see Franconi, Flavia, 605

MASON, D.F.J. see ANWAR, N., 177

МЕСНЛ, P. see Brown, C., 101

MELCHIORRE, C. see BELLEAU, B., 573

— see BELLEAU, B., 617

MIER, P.D. see DAMEN, FRANK J.M., 123

MILLAR, J.S. & VAUGHAN WILLIAMS, E.M. Differential actions on rabbit nodal, atrial, Purkinje cell and ventricular potentials of melperone, a bradycardic agent

delaying repolarization: effects of hypoxia, 109

— Effects on rabbit nodal, atrial, ventricular and Purkinje cell potentials of a new anti-arrhythmic drug, cibenzoline, which protects against action potential shortening in hypoxia, 469

MILLER, R.C. see GODFRAIND, T., 229

MINCHIN, M.C.W. see KENDALL, T.J.G., 219

MITCHELL, H.W. The effect of inhibitors of arachidonic acid metabolism on drug-induced contractions in isolated tracheal smooth muscle cells of the pig, 129

MONCADA, S. see CHIAVARELLI, M., 243

MOODY, C.J. see Brown, C., 101 MORINAN, ALUN see BOTTING, REGINA, 579

MULLANE, K.M. see CHIAVARELLI, M., 243

N

NISHIMURA, MASAKAZU see FUMITOSHI, ASAI, 561 NORMAN, J. see JUDGE, SUSAN E., 353 NORTH, R.A. see ILLES, P., 599

o

OHIZUMI, YASUSHI, TAKAHASHI, MASAMI & TOBE, AKIHIRO. Selective potentiation of noradrenaline guinea-pig vas deferens bv methylaminobutoxy)diphenylmethane hydrochloride (MCI-2016), a new psychotropic drug, 377 OKPAKO, D.T. see ADEAGBO, A.S.O., 49 ONORI, L. see CREMA. A., 311 OWEN, D.G. see GATER, P.R., 341

PAPANICOLAOU, JENNY see LOUIS, W.J., 441 PARRAT, JAMES see KANE, KATHLEEN, 319 PARENTI, MARCO see MANTEGAZZA, PAOLO, 569 PERKINS, M.N. & STONE, T.W. Comparison of the effects of

ethylenediamine analogues and y-aminobutyric acid on cortical and pallidal neurones, 93

PERTWEE, R.G. see FITTON, A.G., 409

PITTMAN, QUENTIN see BLOOM, FLOYD, 251

PORQUET, MARIE-FRANCE, POURRIAS, BERNARD & SAN-TAMARIA, RAPHAEL. Effects of 5-hydroxytryptamine on canine isolated coronary arteries, 305

POTTER, ERIKA K. Angiotensin inhibits action of vagus nerve at the heart, 9

POURRIAS, BERNARD see PORQUET, MARIE-FRANCE, 305 POWELL, RUTH see Jalilian-Tehrani, Mohammad H., 37 PRIETO, B. see CALZADO, M.C., 301

R

RAND, M.J., STORY, D.F., & WONG-DUSTING, H.K. Effects of histamine on resting and stimulation-induced release of [3H]-noradrenaline in guinea-pig isolated atria, 52

RANG, H.P. The action of ganglionic blocking drugs on the synaptic responses of rat submandibular ganglion cells, 151

REID, J.L. see HAMILTON, C.A., 417

RICHARDS, C.D. The actions of pentobarbitone, procaine and tetrodotoxin on synaptic transmission in the olfactory cortex of the guinea-pig, 639

ROESKE, WILLIAM R. see COPELAND, JACK G., 479 ROGERS, JOSEPH see BLOOM, FLOYD, 251

RUSSELL, DIANE H. see COPELAND, JACK G., 479

S

SAH, PANKAJ see GAGE, PETER W., 493 SAKAMOTO, KIMIKO see KUROKAWA, HIROSHI, 87 SAMANIN, R. see INVERNIZZI, R., 525 SAMPSON, SANFORD R. & WEISS-ROTEM, CARMELA. Relaxant effect of lithium on guinea-pig tracheal smooth muscle in vitro, 287

SANTAMARIA, RAPHAEL see PORQUET, MARIE-FRANCE, 305

SATOH, EIKI see FUMITOSHI, ASAI, 561 SCALSI, JENNIE A. see GINTZLER, ALAN R., 199 SHERIDAN, R.E. see COLQUHOUN, D., 77 SHUKLA, R. see DHAWAN, B.N., 145 SHUSTER, S. see CARTER, R.J., 169 SMITH, D.A.S. see EVANS, R.H., 65 SMITH, M.J.H. see CUNNINGHAM, F.M., 383 SPOKAS, ERIC G. see McGRIFF, JOHN C., 137 SPRAGGS, C.F. see BUNCE, K.T., 325 SRIMAL, R.C. see DHAWAN, B.N., 145 STABLES, R. see BUNCE, K.T., 325 STARK, H. see Costa, J.L., 237 STEER, MICHAEL L. see ATLAS, DAPHNE, 213 STENARDI, ISABELLA see FRANCONI, FLAVIA, 605 STEVEN, F.S. see GRIFFIN, M.M., 333 STEWART, G.W. see ELLORY, J.C., 183 STONE, T.W. see PERKINS, M.N., 93 STORY, D.F. see RAND, M.J., 52 SUMMERS, R.J. see LOUIS, W.J., 441 SUMMERS, ROGER J. see JARROTT, BEVYN, 401 Suzuki, Hikaru see Fujiwara, Shigeru, 455

Т

TAKAHASHI, MASAMI see OHIZUMI, YASUSHI, 377 TALESNIK, JAIME see BELO, SUSAN E., 269 TAMMISO, REMIGIO see MANTEGAZZA, PAOLO, 569 THOMAS, PATRICK J. see JALILIAN-TEHRANI, MOHAMMAD H., 37 TIMMER, CEES see KANE, KATHLEEN, 319

TOBE, AKIHIRO see OHIZUMI, YASUSHI, 377 TONINI, M., see CREMA, A., 311 TORRES, A., see CALZADO, M.C., 301

— see Iтон, Такео, 513

U

URAKAWA, NORIMOTO see FUMITOSHI, ASAI, 561

V

Vajda, F.J.E. see Louis, W.J., 441 Vane, J.R. J.H. Burn, an appreciation, 3 Vaughan Williams, E.M. see Millar, J.S., 109 — see Millar, J.S., 469 Vink, Jan see Kane, Kathleen, 319 Vita, Paolo see Mantegazza, Paolo, 569

W

WATKINS, J.C. see EVANS, R.H., 65 WATTS, I.S. see LEWIS, G.P., 623 WAY, E. LEONG see CHAPMAN, D.B., 389 WEETMAN, D.F. see COATES, JILL, 549 Weiss-Rotem, Carmela see Sampson, Sanford R., 287 William, Louis see Jarrott, Bevyn, 401 Womble, J.R. see Copeland, Jack G., 479 Wong, Patrick Y.-K. see McGriff, John, C., 137 Wong-Dusting, H.K. see Rand, M.J., 52 Worcel, Manuel see Hamon, Gilles, 425

Z

Zambotti, Fernanda see Mantegazza, Paolo, 569 Zamboulis, C. see Hamilton, C.A., 417 Zilletti, Lucilla see Franconi, Flavia, 605 Zonta, Nerina see Mantegazza, Paolo, 569 Zukin, Stephen R. see Ginztler, Alan R., 261 Zukin, Suzanne see Ginztler, Alan R., 261

SUBJECT INDEX

A

- A23187, effect on α-adrenoceptor blockade of noradrenaline responses in isolated rat mesenteric artery, 49
- —, effect on β -endorphin-induced analgesia in the mouse, 389
- N-acetyl-cysteine, involvement in exchange reactions leading to inhibition of trypsin by sodium aurothiomalate, 333
- Acetylcholine, action on release of dopamine and acetylcholine from rat nucleus accumbens, 359
- -- , contraction of pig isolated smooth muscle, effect of inhibitors of arachidonic acid metabolism, 129
- , dose-response curves for, effects of MCI-2016 and cocaine in isolated guinea-pig vas deferens, 377
- -- , effect of antimuscarinic agents on synthesis by rat neocortical tissue prisms, 367
- , effect of phencyclidine on dose-response curves to, in guinea-pig ileum, 261
- , induction of inhibition in central nervous system of Helix aspersa, action of general anaesthetics, 353
- , induction of release by cadmium ions in ileal longitudinal muscle of guinea-pig, 561
- , release from slices of rat nucleus accumbens, action of oxotremorine and acetylcholine, 359
- Acetylsalicylic acid, effect on vasoconstrictor phase of response of isolated perfused rat heart to arachidonic acid, 269
- Action potentials, effect of angiotensin II on spontaneous discharge in vascular smooth muscle of rat portal vein, 425
- , effects of harmala alkaloids in guinea-pig papillary muscles, 207
- , induction of reduction in spike frequency and amplitude by bepridil in vitro, 293
- , induction of shortening by hypoxia, effect of cibenzoline on rabbit cardiac tissues, 469
- Adenosine, D and L enantiomers, effect on driven left atrium, trachea, and transmurally stimulated ileum of the guinea-pig, 101
- , differential inhibition of human platelet aggregation induced by adenosine 5'-0-(1-thiodiphosphate) and adenosine 5'-0-(2-thiodiphosphate), 257
- -- , effect of desensitization to, on non-adrenergic inhibitory responses of circular muscle of rabbit colon, 311
- Adenosine diphosphate, release from rabbit platelets during collagen or arachidonic acid induced aggregation, 623
- **Adenosine 5'-diphosphate,** induction of human platelet aggregation, 397
- Adenosine 3',5'-monophosphate, cyclic, effect of noradrenaline, prenalterol and terbutaline on accumulation in rat parotid gland and guinea-pig submandibular glands, 633

- , induction of elevated levels by prostacyclin in rat peritoneal macrophages, effect of prostaglandin E₂, 373
- Adenosine 5'-monophosphate, 2-alkylthio analogues, effect on human platelet aggregation, 397
- **Adenosine** 5'-monophosphorothiate, 2-alkylthio analogues, effect on human platelet aggregation, 397
- Adenosine 5'-O-(1-thiodiphosphate), aggregation of human platelets, differential inhibition by adenosine or by prostaglandin E₁, 257
- Adenosine 5'-O-(2-thiodiphosphate), aggregation of human platelets, differential inhibition by adenosine or by prostaglandin E₁, 257
- **Adenosine 5'-triphosphate**, 2-alkylthio analogues, effect on human platelet aggregation, 397
- , effect of desensitization to, on non-adrenergic inhibitory responses of circular muscle of rabbit colon, 311
- , induction of contractions in smooth muscle cells of canine basilar artery, effect of diltiazem, 455
- , inhibitory responses to in rat and rabbit anococcygeus and bovine retractor penis muscle, effect of ethanol, 189
- Adrenaline, effect of ethanol on hypothalamic levels in guinea-pigs exposed to severe cold, 613
- , effect on action of melanocyte-stimulating hormone in Anolis, 169
- , effect on induction of myocardial ornithine decarboxylase in mice in vivo, 479
- $\alpha\text{-}\textbf{Adrenoceptor}$ agonists, comparison of cardiovascular and sedative actions in the rat, 13
- α-Adrenoceptor agonists, effects on [3H]-guanfacine binding to membranes from rat brain, 401
- α-Adrenoceptor antagonists, effects on [³H]-guanfacine binding to membranes from brain, 401
- α-Adrenoceptors, blockade by benextramine in guinea-pig atrium, 617
- α-Adrenoceptors, blockade of noradrenaline-induced vasoconstriction in rat isolated mesenteric artery, effect of prostaglandin E₂, 49
- , in rat parotid slices and human platelet membranes, interactions with new haloperidol analogues, 213
- , role in the regulation of blood pressure in the conscious rabbit, 417
- -, stimulation by clonidine in the pithed rat, 13
- , subtypes in rat anococcygeus, identified by Sgd 101/75 and phenoxybenzamine, 549
- α_2 -Adrenoceptors, labelling by [3 H]-guanfacine in homogenates of rat brain, 401
- , on Anolis melanophore, association with melanocytestimulating hormone receptor, 169
- **β-Adrenoceptor agonists,** effects of isomers on pentylenetetrazol-induced convulsions in the rat, 441
- , effects on amylase secretion and cyclic adenosine 3',5'-monophosphate accumulation in rat parotid and

- guinea-pig submandibular glands, 633
- β-Adrenoceptors, activation by catecholamines in pre- and post-junctional membrane of dog trachea, 433
- , lack of antagonism by cibenzoline in rabbit cardiac tissue, 469
- , role in the control of pentylenetetrazol-induced convulsions in the rat, 441
- β_2 -Adrenoceptors, regulation of induction of myocardial ornithine decarboxylase in mice *in vivo*, 479
- Age, effect on responses of guinea-pig airways in vivo and in vitro to cimetidine and propranolol, 531
- Aggregation, rabbit platelets, collagen- or arachidonic acidinduced in relation to prostaglandin endoperoxides, thromboxane A₂ and adenosine diphosphate, 623
- , of rat or human polymorphonuclear leukocytes induced by leukotriene B₄, 383
- **Airways**, guinea-pig, changes in the *in vivo* and *in vitro* responses to cimetidine and propranolol during development, 531
- β-Alanine, effect on high potassium- and noradrenalineinduced contraction of rabbit ear artery, 605

Alcohol see Ethanol

- **Alcohol dehydrogenase,** effect of changes in activity on blood alcohol levels in the rat, 251
- Ambient temperature, effect on changes in body temperature and oxygen consumption induced by intrahypothalamic and intracerebroventricular injection of Δ^9 -tetrahydrocannabinol in mice, 409
- -, effect on responses to ethanol in guinea-pigs, 613
- , effect on thermoregulatory responses to histamine in Mastomys natalensis, 145

N-amidino-2-(2,6-dichloro 3 [³H] phenyl) acetamide hydrochloride see Guanfacine

- Amiloride, effect on responses of rat colon to kinins, 587
- , inhibitory potency on human red cell sodiumpotassium cotransport system, 183
- Amine-haloperidol, synthesis and characterization of interaction with α-adrenoceptors in rat parotid slices and human platelet membranes, 213
- 4-Amino-3-(2,6-dichlorobenzylidenehydazino)-1,2,4triazolo hydrochloride see FLA-136
- 2-Amino-ethanol, effect on rat cortical and pallidal neurones, 93
- γ-Aminobutyric acid, actions on the responses of the isolated basilar artery from the rabbit, 177
- , effect of anaesthetics on uptake and release in rat thalamic slices, 219
- —, effect on cortical and pallidal neurones in the rat, 93
- γ-Aminobutyric acid receptors, involvement in the actions of benzodiazepines in rats, 569
- **3-Aminopropane,** effect on the responses of the rabbit isolated basilar artery, 177
- **Amitriptyline,** effect on acetylcholine synthesis in rat neocortical prisms, 367
- **Amygdala,** greater [³H]-dopamine binding in male rats than female rats, 37
- Amylase, effect of noradrenaline, prenalterol and terbutaline on release from rat parotid and guinea-pig submandibular glands, 633
- —, effect of substance P analogues on activity in rat parotid gland in vitro. 341
- Amylobarbitone, postsynaptic effects at the neuromuscular junction of sartorius muscle of *Bufo marinus*, 493

- Anaesthetics, action on acetylcholine-induced inhibition in the central nervous system of *Helix aspersa*, 353
- , action on synaptic transmission in the olfactory cortex of the guinea-pig, 639
- , effect on the uptake and release of amino acid neurotransmitters in thalamic slices, 219
- Analgesia, induction by endorphins, enkephalins or stress, modification by divalent cations in mice, 389
- , induction by morphine, tolerance to, in rats given morphine ad libitum in drinking water, 485
- , induction by morphine or pethidine in the mouse, involvement of 5-hydroxytryptamine, 579
- **Androgenization,** effect on high affinity dopamine binding in different regions of female rat brain, 37
- **Angiotensin II,** inhibition of action of vagus nerve in dog and guinea-pig heart, 9
- , mechanism of action on excitation-contraction coupling in the rat portal vein, 425
- , role in regulation of glomerular filtration in rat kidney,
 553
- Angiotensin III, inhibition of action of vagus nerve in dog and guinea-pig heart, 9
- Angiotensin converting enzyme inhibitor, effect on renal haemodynamic responses to noradrenaline infusion in the rat, 553
- Anococcygeus muscle, rat, existence of a new subtype of α-adrenoceptor is revealed by Sgd 101/75 and phenoxybenzamine, 549
- , rat and rabbit, effect of ethanol on inhibitory and motor responses, 189
- Antinociception, morphine-induced, effects of centrally administered diazepam and midazolam in the rat, 569
- **Apomorphine**, effect on binding of [³H]-dopamine to cerebral cortical membrane fractions of the rat, 37
- **Aprophen,** effect on acetylcholine synthesis in rat neocortical prisms, 367
- Arrhythmias, coronary artery ligation-induced, effect of Org 6001 in rats, 319
 - -, effect of cibenzoline in rabbit heart, 469
- **Arachidonic acid,** effect of inhibitors of metabolism on drug-induced contractions in isolated tracheal smooth muscle of the pig, 129
- , effect on drug-induced contractions in isolated tracheal smooth muscle of the pig, 129
- , induction of thromboxane A₂ and prostaglandin release in relation to aggregation of rabbit platelet aggregation, 623
- , vasoconstrictor and vasodilator actions in the isolated perfused heart of the rat, 269
- Artery, rabbit ear, effect of taurine on high potassium- and noradrenaline-induced contraction, 605
- **Ascorbic acid,** identification of oxidation peak by differential pulse voltammetry in rat striatum, 539
- **D-Aspartate**, effect of anaesthetics on uptake and release in rat thalamic slices, 219
- **Aspirin,** effect on lesion production and ionic permeability in rat gastric mucosa, 325
- —, effect on nephrotoxic serum nephritis in the rat, 87
- , effect on thromboxane synthetase and cyclo-oxygenase in rabbit platelets, 623
- Atrium, driven left, effect of adenosine and its analogues in the guinea-pig, 101

- —, guinea-pig, effect of angiotensin II and III on the action of vagus nerve on, 9
- , guinea-pig isolated, effect of benextramine on presynaptic effects of clonidine, 617
- , guinea-pig isolated, effects of histamine on the resting and stimulation-induced release of [3H]noradrenaline, 52
- , guinea-pig isolated, inhibition of histamine H₂-receptor mediated chronotropic effects by benextramine, 573
- , rabbit, effect of melperone on action potential duration, 109
- , rabbit, effect of cibenzoline on action potential duration, 469
- **Atropine**, blockade of 5-hydroxytryptamine induced contracture of dog trachea, 433
- , effect on acetylcholine synthesis by rat neocortical tissue prisms, 367
- —, effect on the action of oxotremorine on dopamine release in slices of rat nucleus accumbens, 359
- 2-Azidoadenosine, D and L enantiomers, effect on driven left atrium, trachea and transmurally stimulated ileum of the guinea-pig, 101

В

- **Baclofen,** effect on barbiturate-induced enhancement of potassium ion stimulated release of amino acids in rat thalamic slices, 219
- -, effect on muscle rigidity in the spastic mouse, 23
- , effect on responses of the rabbit isolated basilar artery,
 177

Barium ions, effect on endorphin/enkephalin- and stress-induced analgesia in the mouse, 389

Basal heart rate, influence on the prostacyclin-induced changes in heart rate in dogs, 243

Basilar artery, dog, effect of diltiazem on membrane properties and mechanical responses of smooth muscle cells, 455

-- , rabbit isolated, effect of γ-aminobutyric acid on responses of, 177

Behavioural symptoms, in rats after withdrawal of morphine from drinking water, 485

Bemegride, postsynaptic effects at neuromuscular junction of sartorius muscle of *Bufo marinus*, 493

Benactyzine, effect on acetylcholine synthesis in rat neocortical prisms, 367

Benextramine, antagonism of presynaptic effect of clonidine in guinea-pig left atrium, 617

, inhibition of cardiac chronotropic histamine H₂-receptor-mediated effects, 573

Benzodiazepines, involvement of γ -aminobutyric acid receptors in the actions of, in the rat, 569

Benztropine, effect on muscle rigidity in the spastic mouse,

Benztropine mesylate, effect on acetylcholine synthesis in rat neocortical prisms, 367

Bepridil, induction of persistent bradycardia and nonspecific anti-tachycardial effect, *in vivo* and *in vitro* studies, 293

Bicuculline, effect on barbiturate-induced enhancement of

- potassium ion stimulated release of amino acids in rat thalamic slices, 219
- , effect on midazolam-induced reduction in analgesic effects of morphine in the rat, 569
- —, effect on the actions of γ-aminobutyric acid and agonists on the responses to rabbit isolated basilar artery, 177
- **Bilateral vagotomy**, effect on bradycardia induced by prostacyclin, prostaglandin E₂ and bradykinin in the dog, 243
- **Binding sites,** [3H]-phencyclidine and opiate, effect of phencyclidine and related drugs in guinea-pig ileum, 261
- **Blood,** rat, effect of intraperitoneal injection of ethanol on alcohol levels, inadequacy of dose/body weight formulations, 251
- **Blood flow,** renal, effect of noradrenaline plus teprotide in the rat, 553
- **Blood pressure,** arterial, effect of α-adrenoceptor blockade in the conscious rabbit, 417
- -, effect of clonidine and FLA-136 in the rat, 13
- , effect of intra-aortic injection of arachidonic acid, prostaglandin E₂ and prostacyclin in isolated perfused rat heart, 269
- , renal, effect of noradrenaline plus teprotide in the rat,
 553
- t-Boc-tyrosine-haloperidol, synthesis and characterization of interactions with α-adrenoceptors in rat parotid slices and human platelet membranes, 213
- **Body temperature,** effect of fenfluramine or *p*-chlorophenylalanine in mice treated with pethidine or morphine, 579
- —, effect of intrahypothalamic and intracerebroventricular injections of Δ^9 -tetrahydrocannabinol in mice, 409
- **Body weight,** effect of oral administration of morphine in rats, 485
- , loss in rats after withdrawal of morphine from drinking water, 485
- **Bone marrow cultures,** effect of cimetidine or homatopoiesis *in vitro*, 301
- **Bovine serum albumin,** involvement in exchange reactions leading to inhibition of trypsin by sodium aurothiomalate, 333
- **Bradycardia,** bepridil-induced in vivo and in vitro studies, 293
- —, effect of melperone in the rat, 109
- —, induction by cibenzoline in rabbit, 469
- —, induction in the rat by α-adrenoceptor agonists, 13
- , prostacyclin-induced, dependence on dose and basal heart rate in the dog, 243
- **Bradykinin,** effect on heart rate in some dogs, dependence on basal heart rate, 243
- , effect on short circuit current, transepithelial conductance and ion fluxes across rat colon, 587
- , inhibitory responses to in rat and rabbit anococcygeus and bovine retractor penis muscle, effect of ethanol, 189
- **Brainstem,** rat, effect of (+)-fenfluramine, (+)-norfenfluramine and reserpine on concentrations of indoles, 525
- **Bromocriptine,** effect on muscle rigidity in the spastic mouse, 23
- Bumetanide, inhibitory potency on human red cell sodium-

potassium cotransport system, 183

Burn, J.H., an appreciation, 3

(+)-Butaclamol, effect on [³H]-dopamine binding to cerebral cortical membrane fractions of the rat, 37

Butylimidazole, effect on thromboxane synthetase and cyclo-oxygenase in rabbit platelets, 623

C

Cadmium, mechanism of induction of contraction in ileal longitudinal muscle of guinea-pig, 561

Caffeine, effect on scheduled controlled responding in rats, 451

- , induction of contraction of smooth muscle cells of canine basilar arteries, effect of diltiazem, 455
- , induction of contractions, effects of calmodulin or chlorpromazine in intact or skinned muscle cells of guinea-pig mesenteric artery, 513

Cadmium ions, effect on endorphin/enkephalin- and stressinduced analgesia in the mouse, 389

Calcium, effect of diltiazem on storage sites in smooth muscle cells of canine basilar artery, 455

- , extracellular concentrations, effect on ethanol-induced contractions in rat and rabbit anococcygeus and bovine retractor penis muscle, 189
- —, extracellular concentrations, effect on prostaglandin $F_{2\alpha}$ -induced contractions in rat mesenteric arteries, 229
- , induction of contractions, effects of calmodulin or chlorpromazine in intact or skinned muscle cells of guinea-pig mesenteric artery, 513
- Calcium entry blocking drugs, effect on the actions of prostaglandin $F_{2\alpha}$ and noradrenaline on calcium exchange and contractions in rat mesenteric artery, 229
- Calcium ion channels, activation by prostaglandin E₂, restoration of responses to noradrenaline after αadrenoceptor blockade in rat isolated mesenteric artery, 49

Calcium ions, effect on endorphin/enkephalin- and stressinduced analgesia in the mouse, 389

- , effect on spontaneous and evoked excitatory junction potentials in mouse vas deferens, 599
- , extracellular concentrations, effect on cadmiuminduced contraction and acetylcholine release in ileal longitudinal muscle of guinea-pig, 561
- , facilitation of influx by prostaglandin E₂, restoration of responses to noradrenaline after α-adrenoceptor blockade in rat isolated mesenteric artery, 49
- , modulation of [3H]-guanfacine binding to homogenates of rat brain, 401

Calmodulin, effects on the electrical and mechanical properties of intact and skinned muscle cells of guinea-pig mesenteric artery, 513

Carbachol, action on guinea-pig tracheal strips, effect of lithium, 287

- —, effect on membrane potentials in voltage-clamped endplate of frog muscle, effect of tubocurarine, 77
- , inhibitory and motor responses to in rat and rabbit anococcygeous and bovine retractor penis muscle, effect of ethanol, 189
- Carboxyheptylimidazole, effect on thromboxane synthetase and cyclo-oxygenase in rabbit platelets, 623

Castration, effect on high affinity dopamine binding in different regions of the brain of male rats, 37

Cerebellum, specific [³H]-guanfacine binding to prepared membranes, 401

Cerebral cortex, rat, greater [3H]-dopamine binding in male rats than female rats, 37

, rat, specific [³H]-guanfacine binding to prepared membranes, 409

Chemokinesis, of rat or human polymorphonuclear leukocytes induced by leukotriene B₄, 383

Chloride, stimulation of secretion by kinins in rat colon, 587

**Chloride ion fluxes, in response to kinins in rat colon, 587

2-Chloroadenosine, D and L enantiomers, effect on driven left atrium, trachea and transmurally stimulated ileum of the guinea-pig, 101

p-Chlorophenylalanine, effect on pethidine and morphineinduced analgesia in the mouse, 579

Chlorothiazide, inhibitory potency on human red cell sodium-potassium cotransport system, 183

Chlorpromazine, effect on electrical and mechanical properties of intact and skinned muscle cells of guinea-pig mesenteric artery, 513

Cholesterol, serum levels after nephrotoxic serum injection, effect of aspirin, prednisolone and indomethacin in the rat, 87

Chronotropic effect, histamine H₂-receptor mediated in guinea-pig isolated atrium, effect of benextramine, 573

Cibenzoline, effect of, on potentials of cardiac tissues in the rabbit, 469

Cimetidine, blockade of hyperthermia induced by histamine and histamine H₂ receptor agonists in *Mastomys natalensis*, 145

- , effect on histamine inhibition of stimulation-induced release of [3H]-noradrenaline in guinea-pig isolated atrium, 52
- , modification in haematopoiesis, study in bone marrow cultures in vitro, 301
- , plus benextramine, blockade of cardiac chronotropic histamine H₂-receptor-mediated effects in guinea-pig, 573
- responses of guinea-pig airways in vivo and in vitro, changes during development, 531

Cinnarizine, effect on actions of prostaglandin $F_{2\alpha}$ and noradrenaline on calcium exchange and contractions in rat mesenteric artery, 229

 , inhibition of noradrenaline-induced vasoconstriction, effect of prostaglandin E₂ in rat mesenteric artery, 49

Circular muscle, rabbit colon, effect of desensitization to adenosine 5'-triphosphate and adenosine on non-adrenergic inhibitory responses, 311

Clonidine, antagonism of presynaptic effects in guinea-pig left atrium by benextramine, 617

- , comparison of the cardiovascular and sedative actions with those of FLA-136 in the rat, 13
- , effect on action of melanocyte-stimulating hormone in Anolis. 169
- , effect on potassium-evoked release of noradrenaline in the presence of cocaine in guinea-pig vas deferens, 377

Clotrimazole, effect on thromboxane synthetase and cyclooxygenase in rabbit platelets, 623

Clozapine, effect on acetylcholine synthesis in rat neocortical prisms, 367

Cobalt ions, effect on spontaneous and evoked excitatory

junction potentials in mouse vas deferens, 599

Cocaine, comparison of effects with those of MCI-2016 in isolated guinea-pig vas deferens, 377

- , effect on histamine effects on resting and stimulationinduced release of [3H]-noradrenaline in guinea-pig isolated atrium, 52
- Colchicine, effect on aggregation and chemokinesis in rat or human polymorphonuclear leukocytes induced by leukotriene B₄, 383
- Cold, effect of exposure to, on hypothalamic catecholamines in guinea-pigs exposed to ethanol, 613
- Collagen, induction of thromboxane A₂ and prostaglandin release in relation to aggregation of rabbit platelets, 623

Colon, rat, kinin stimulated chloride secretion, 587

Contractile properties, of smooth muscle cells of dog trachea, effects of catecholamines, 433

Contractions, cadmium-induced in ileal longitudinal muscle of guinea-pig, mechanisms, 561

- -- , evoked by depolarization of the membrane of smooth muscle cells, suppression by catecholamines, 433
- , electrically-induced, effect of phencyclidine and its derivatives in guinea-pig enteric neurones, 261
- , 5-hydroxytryptamine-induced in canine isolated coronary arteries, 305
- , in intact and skinned muscle cells of guinea-pig mesenteric artery, effect of chlorpromazine or calmodulin, 513
- , induced by high potassium concentrations or noradrenaline, effect of taurine and analogues in rabbit ear artery, 605
- , induced by prostaglandin $F_{2\alpha}$ or noradrenaline in rat mesenteric arteries, 229
- , induction by ethanol in rat and rabbit anococcygeus muscle and bovine retractor penis muscle, 189
- , induction in guinea-pig ileum by substance P analogues, in relation to activities in rat parotid gland in vitro, 341

Contracture, noncholinergic, in guinea-pig isolated ileum, effect of opioids, 199

 tonic, production in dog trachea by 5hydroxytryptamine, 433

Convulsions, pentylenetetrazol-induced, effects of β -adrenoceptor agonists in the rat, 441

Coronary arteries, dog, effects of 5-hydroxytryptamine, 305

Cortical neurones, effect of ethylenediamine analogues and γ-aminobutyric acid in the rat, 93

Creatine phosphate/creatine phosphokinase, effect on collagen-induced aggregation of rabbit platelets, 623

Cytochalsin B, effect on aggregation and chemokinesis in rat or human polymorphonuclear leukocytes-induced by leukotriene B₄, 383

Cytoskeleton, involvement in biological activity of leukotriene B₄, 383

D

Dansyl-haloperidol, synthesis and characterization of interactions with α -adrenoceptors in rat parotid slices and human platelet membranes, 213

- **Dependence,** on morphine, production in rat by administration in drinking water, 485
- **Dexamethasone**, effect on drug-induced contractions in isolated smooth muscle of the pig, 129
- **Dexetimide,** effect on acetylcholine synthesis by rat neocortical tissue prisms, 367

Di-homo-y-**linolenic acid**, coronary reaction in the rat, 269 **Diamines**, effect on rat cortical and pallidal neurones, 93

Diazepam, effect on muscle rigidity in the spastic mouse, 23

—, modification of antinociceptive effect of morphine in the rat. 569

Diethylenetriamine, effect on rat cortical and pallidal neurones 93

- Differential pulse voltammetry, identification of oxidation peaks for ascobic acid, catechol and indoleamines in rat striatum and frontal cortex, 539
- 4, 6-Diflouro-5-hydroxytryptamine, uptake into releasable and non-releasable compartments of human platelets, 237
- 3,4-Dihydroxyphenylacetic acid, identification of oxidation peak by differential pulse voltammetry in rat striatum and frontal cortex, 539

Diltiazem, effect on smooth muscle cells of canine basilar arteries. 455

Dimaprit, effect on acetylcholine-induced tone in guineapig airways, 531

D-β-4-S-dimethylaminoethyl-2-S-(S-1-cyclohexyl-1hydroxy-1-pheny)methyl-1,3-dioxolan, effect on acetylcholine synthesis in rat neocortical prisms, 367

D-α-4-S-dimethylaminoethyl-2-R(R-1-cyclohexyl-1phenyl)methyl-1,3-dioxolan, effect on acetylcholine synthesis in rat neocortical prisms, 367

Dimethylaminoethyl-2-cyclohexyl-2-hydroxy-2phenylacetate, effect on acetylcholine synthesis in rat neocortical prisms, 367

Diphenylhydantoin, effect on muscle rigidity in the spastic mouse, 23

Dipyridamole, effect on vasoconstrictor phase of response of isolated perfused rat heart to arachidonic acid, 269

- , potentiation of effects of adenosine and its analogues in driven left atrium, trachea and transmurally stimulated ileum of the guinea-pig, 101
- , potentiation of non-adrenergic inhibition in response to transmural stimulation in circular muscle of rabbit colon, 311

Diuretics, model for studying the action using sodiumpotassium cotransport system in human red cell, 183

Divalent metal ions, involvement in the actions of opiates,

Dopamine, effect of γ-hydroxybutyrate on mouse striatal levels, 447

- , effect on action of melanocyte-stimulating hormone in Anolis, 169
- , effect on binding of [3H]-dopamine and [3H]-5hydroxytryptamine binding in areas of rat brain, 37
- identification of oxidation peak by differential pulse voltammetry in rat striatum and frontal cortex, 539
- , release from slices of rat nucleus accumbens, action of oxotremorine and acetylcholine, 359
- [3H]-dopamine, effect of androgen-induced sexual dimorphism on high affinity binding in different regions of rat brain, 37
- Dopamine binding sites, effect of neonatal exposure to

steroid hormones, effect on numbers in rat cerebral cortex and amygdala, 37

E

- **5,8,11,14-Eicosatetraynoic acid,** blockade of indomethacin-mediated potentiation of histamine-induced contractions, 129
- Electrical stimulation, high voltage, inotropic responses to, effect of phentolamine or benextramine in guinea-pig atrium, 617
- —, of the peripheral end of the cut vagus, induction of decreased heart rate, effect of angiotensin II and III, 9
- —, responses in isolated spinal cord preparations, effect of ω-phosphonic α-carboxylic amino acids, 65
- , transmural, contractile responses to, effects of MCI-2015, 377
- —, transmural, production of contractions in rabbit basilar artery, effect of γ-aminobutyric acid and agonists, 177
- β-Endorphin, induction of analgesia, effects of divalent cations, cation chelator and an ionophore in the mouse, 389
- Endplate channels, open, blockade by indoklon in sartorius muscle of *Bufo marinus*, 493
- Enkephalin, D-Ala²-D-Leu⁵, effect on non-cholinergic contracture in guinea-pig isolated ileum, 199
- , Met-, induction of analgesia, effects of divalent cations, cation chelator and an ionophore in the mouse, 389
- , D-Met⁵-Pro⁵, effect on noncholinergic contracture in guinea-pig isolated ileum, 199
- Enteric neurones, effects of phencyclidine and its derivatives on intact segments of guinea-pig ileum, 261
- Erythrocyte, human, use of chlorine dependent sodiumpotassium cotransport system as model for studying action of loop diuretics, 183
- Erythroid colony, effect of cimetidine in humans in vitro,
- Ethacrynic acid, inhibitory potency on human red cell sodium-potassium cotransport system, 183
- Ethanol, blood levels in rat after intraperitoneal injections of ethanol, inadequacy of dose/body weight formulations, 251
- , effect on hypothalamic catecholamines in severe cold in the guinea-pig, 613
- , effect on inhibitory and motor responses in the rat and rabbit anococcygeus and bovine retractor penis muscles. 189
- Ether analogues, postsynaptic effects at neuromuscular junction of sartorius muscle of *Bufo marinus* 493
- 5-Ethyl-5-(3'-methyl-but-2'enyl)barbituric acid, post synaptic effects at neuromuscular junction of sartorius muscle of *Bufo marinus*, 493
- N-ethyl-3-piperidyl benzilate, effect on acetylcholine synthesis in rat neocortical prisms, 367
- 5'-N-ethylcarboxamidoadenosine, D and L enantiomer, effect on driven left atrium, trachea and transmurally stimulated ileum of the guinea-pig, 101
- Ethylene glycol tetraacetic acid, effect on contraction induced by prostaglandin $F_{2\alpha}$ or noradrenaline in rat mesenteric artery, 229
- , effect on endorphin-induced analgesia in the mouse, 389

- Ethylenediamine analogues, effect on cortical and pallidal neurones in the rat, 93
- Ethylenediamine tetraacetic acid, lack of effect on β endorphin analgesia in the mouse, 389
- 2-Ethylthio-adenosine 5'-monophosphate, -'monophosphorate, -triphosphate, effect on human platelet aggregation, 397
- Etomidate, action on acetylcholine-induced inhibition in the central nervous system of *Helix aspersa*, 353
- **Exchange reactions,** participation by sodium aurothiomalate leading to inhibition of trypsin, 333
- Excitant amino acids, responses in isolated spinal cord preparations, effect of ω-phosphonic α-carboxylic amino acids, 65
- Excitation-contraction coupling, in rat portal vein, effect of angiotensin II, 425
- Excitatory junction potentials, spontaneous and evoked, effect of divalent cations and normorphine in mouse vas deferens, 599
- , suppression of amplitude by catecholamines in dog trachea, 433

F

- **Fenfluramine,** effect on pethidine and morphine induced analgesia in the mouse, 579
- (+)-Fenfluramine, effect on concentration of 5hydroxytryptamine and 5-hydroxyindole-acetic acid in rat brain, 525
- Filtration fraction, effect of noradrenaline plus teprotide in the rat kidney, 553
- Firing rates, of cortical and pallidal neurones, effect of ethylenediamine analogues and γ -aminobutyric acid in the rat, 93
- **FK-33-824**, effect on noncholinergic contracture in guineapig isolated ileum, 199
- FLA-136, comparison of the cardiovascular and sedative actions with those of clonidine in the rat, 13
- **6-Flouro-5-hydroxytryptamine**, uptake into releasable and non-releasable compartments of human platelets, 237
- Flunarizine, effect on actions of prostaglandin $F_{2\alpha}$ and noradrenaline on calcium exchange and contractions in rat mesenteric artery, 229
- **Flunitrazepam**, effect on muscle rigidity in the spastic mouse, 23
- Fluoxetine, effect on [³H]-5-hydroxytryptamine binding to rat forebrain, 37
- α-Flupenthixol, effect on binding of [³H]-dopamine to cerebral cortical membrane fractions of the rat, 37
- Fluphenazine, effect on [³H]-dopamine binding to cerebral cortical membrane fractions of the rat, 37
- Food reinforcement schedule, effects of caffeine, theophylline and theobromine in rats, 451
- FPL 55712, effect on drug-induced contractions in pig isolated tracheal smooth muscle, 129
- Free fatty acids, effect of ethanol on serum levels in guineapigs exposed to severe cold, 613
- Frontal cortex, rat, identification of oxidation peaks by differential pulse voltammetry, 539
- Frusemide, effect on responses of rat colon to kinins, 587
- , and its analogues, inhibitory potency on human red cell sodium-potassium cotransport system, 183

G

- Ganglionic blocking drugs, effect on synaptic responses of rat submandibular ganglion cells, 151
- Gastric mucosa, rat, relationship between lesion formation and ionic permeability, 325
- Gluconate ions, in serosal bath, effect on responses of rat colon to kinins, 587
- Glucose, serum levels in guinea-pigs given ethanol and exposed to severe cold, 613
- **Glycogen**, effect of ethanol on levels in liver and skeletal muscle in guinea-pigs exposed to severe cold, 613
- Glomerular filtration rate, effect of noradrenaline plus teprotide in the rat kidney, 553
- Gold, inhibition of trypsin, 333
- **Granulocytic-macrophagic colony,** effect of cimetidine in humans *in vitro*, 301
- **Granuloma macrophages,** rat peritoneal, inhibition of prostacyclin-induced elevation of cyclic adenosine 3',5'-monophosphate by prostaglandin E₂, 373
- [3H]-guanfacine, high affinity binding to α_2 -adrenoceptor sites in homogenates of rat brain, 409
- **Guanosine 5'-triphosphate,** modulation of [³H]-guanfacine binding to homogenates of rat brain, 409

Н

- **Haematopoiesis**, effects of cimetidine in bone marrow culture *in vitro*, 301
- **Haloperidol**, effect on binding of [³H]-dopamine to cerebral cortical membrane fractions of the rat, 37
- Haloperidol analogues, synthesis and characterizations of their interactions with α -adrenoceptors in rat parotid slices and human platelet membranes, 213
- Halothane, postsynaptic effects at neuromuscular junction of sartorius muscle of *Bufo marinus*, 493
- Harmala alkaloids, effect on transmembrane potentials of guinea-pig papillary muscles, 207
- Heart, dog and guinea-pig, effect of angiotensin II and III on action of vagus nerve on, 9
- , guinea-pig, effect of harmala alkaloids on transmembrane potentials in papillary muscles, 207
- -, isolated perfused rat, vasoconstrictor and vasodilator
- actions of arachidonic acid, 269
 , mouse foetal, effect of adrenoceptor agonists and antagonists on ornithine decarboxylase activity in vivo,
- 479
 Heart rate, bepridil-induced reduction, in dogs with abla-
- tion of extrinsic cardiac afferent nerve supply and bilateral medullo-adrenalectomy, 293

 —, changes induced by prostacyclin, prostaglandin E₂ and
- bradykinin depend on basal state, 243

 —, decreases evoked by electrical stimulation of peripher-
- al end of cut vagus, effect of angiotensin II and III, 9

 —, effect of α-adrenoceptor blockade in the conscious
- -, effect of clonidine and FLA-136 in the rat, 13

rabbit, 417

- **Hexamethonium**, action on synaptic responses of rat submandibular gangion cells, 151
- , effect on atropine-resistant contracures and on responses to morphine and opioids in isolated guinea-pig ileum, 199

- , effect on cadmium-induced contraction in ileal longitudinal muscle of guinea-pig, 561
- **Hexochlorobenzene**, induction of O-dealkylase activity in the mouse, 123
- High-voltage stimulation, inotropic responses to, effect of phentolamine or benextramine in guinea-pig atrium, 617
- **Hippocampus**, rat, specific [³H]-guanfacine binding to prepared membranes, 409
- **Histamine,** action on guinea-pig tracheal strips, effect of lithium, 287
- , contraction of pig isolated tracheal smooth muscle, effect of inhibitors of arachidonic acid metabolism, 129
- , effect of propranolol and cimetidine on responses of guinea-pig airways to, 531
- -, effect on rectal temperature of Mastomys natalensis, 145
- -- , effect on resting and stimulation-induced release of [³H]-noradrenaline in guinea-pig isolated atrium, 52
- H₂-receptor-mediated chronotropic effect on guineapig isolated atrium, effect of benextramine, 573
- **Histamine H₂-receptor agonists,** effect on isolated tracheal smooth muscle of the pig, effect of inhibitors of arachidonic acid metabolism, 129
- **Histamine H₁ receptors,** mediation of hypothermia in *Mastomys natalensis*, 145
- Histamine H₂ receptors, antagonism by cimetidine, effect on responses to histamine in guinea-pig airways, 531
- , involvement in cardiovascular responses to FLA-136 and clonidine in the rat, 13
- , mediation of chronotropic effects of histamine on guinea-pig isolated atrium, effect of benextramine, 573
- , mediation of hyperthermia in Mastomys natalensis, 145
- **Histidine**, binding to heavy metal ions at the active centre of trypsin, 333
- **Homotaurine,** effect on high potassium- and noradrenaline-induced contraction in rabbit ear artery, 605
- Homovanillic acid, effect of γ-hydroxybutyrate on mouse striatal levels, 447
- **Hydralazine**, effect on regulation of blood pressure in the conscious rabbit, 417
- **p-Hydroxy-haloperidol,** synthesis and characterization of interactions with α-adrenoceptors in rat parotid slices and human platelet membranes, 213
- **Hydroxyamphetamine,** ionization and a new method for calculating zwitterion constants, 503
- γ-Hydroxybutyrate, effect on mouse striatal tyramine, dopamine and homovanillic acid levels, 447
- **6-Hydroxydopamine,** effect of chemical sympathectomy on cardiovascular responses to FLA-136 and clonidine in the rat, 13
- 5-Hydroxyindoleacetic acid, effect of (+)-fenfluramine, (+)-norfenfluramine and reserpine on rat brain concentrations, 525
- , identification of oxidation peak by differential pulse voltammetry in rat striatum and frontal cortex, 539
- 9-Hydroxyprostaglandin dehydrogenase, relationship between activity and zonal distribution of renin in rabbit kidney, 137
- [³H]-5-hydroxytryptamine, effect of androgen-induced sexual dimorphism on high affinity binding in different regions of rat brain, 37

- **5-Hydroxytryptamine**, effect of (+)-fenfluramine, (+)-norfenfluramine and reserpine on rat brain concentrations, 525
- -, effects on canine isolated coronary arteries, 305
- , identification of oxidation peak by differental pulse voltammetry in rat striatum and frontal cortex, 539
- , involvement in the analgesic action of pethidine and morphine in the mouse, 579
- -, production of tonic contracture of dog trachea, 433
- 5-Hydroxytryptamine receptors, role in mechanism by which (+)-fenfluramine and (+)-norfenfluramine deplete rat brain 5-hydroxytryptamine, 525
- **Hyoscine**, effect on cadmium-induced contraction in ileal longitudinal muscle of guinea-pig, 561
- **Hyperaemia**, response to coronary occlusion, effect of nonsteroidal anti-inflammatory agents in isolated perfused rat heart, 269
- Hyperthermia, induced by histamine, impromidine and dimaprit in *Mastomys natalensis*, 145
- **Hypotension,** production in rat by α -adrenoceptor agonists, 13
- -, prostacyclin-induced in the dog, 243
- Hypothalamus, guinea-pig, effect of ethanol administration on levels of catecholamines after exposure to severe cold, 613
- , rat, specific [³H]-guanfacine binding to prepared membranes, 409
- Hypothermia, induction in *Mastomys natalensis*, by histamine, 2-methyl histamine and 2-pyridyl-ethylamine, 145
- —, production in mice by Δ^9 -tetrahydrocannabinol in mice, 409
- Hypoxia, induction of action potential shortening in rabbit cardiac tissues, effect of cibenzoline, 469
- , shortening of action potential duration in rabbit nodal, atrial, Purkinje cell and ventricular cells, effect of melperone, 109

I

Ileum, guinea-pig, effect of phencyclidine and related drugs on enteric neurones, 261

- -, guinea-pig, effects of substance P-related peptides, 341
- , guinea-pig, mechanisms of cadmium-induced contraction of longitudinal muscle, 561
- , guinea-pig isolated, effects of opioids on noncholinergic contracures, 199
- —, guinea-pig transmurally stimulated, effect of adenosine and its analogues, 101
- Imidazole, effect on thromboxane synthetase and cyclooxygenase in rabbit platelets, 623
- , involvement in exchange mechanisms leading to inhibition of trypsin by sodium aurothiomalate, 333
- 4(2-Imidazoline-amino)-2-methylindazol-chlorhydrate see Sgd 101/75
- **Impulse conduction,** effect of pentobarbitone, procaine and tetrodotoxin in the olfactory cortex of the guinea-pig, 639
- **Indoklon,** postsynaptic effects at neuromuscular junction of sartorius muscle of *Bufo marinus*, 493
- Indomethacin, effect on drug-induced contractions in iso-

- lated tracheal smooth muscle cells of the pig, 129
- , effect on nephrotoxic serum nephritis in the rat, 87
- -, effect on responses of rat colon to kinins, 587
- , effect on thromboxane synthetase and cyclo-oxgenase in rabbit platelets, 623
- , inhibition of responses to arachidonic acid in isolated perfused rat heart, 269
- **Inhibitory responses,** in rat and rabbit anococcygeus and bovine retractor penis muscles, effect of ethanol, 189
- Inotropic response, to electrical stimulation, effect of phentolamine or benextramine in guinea-pig atrium, 617
- Ion fluxes, measurement of response to kinins in isolated rat colon, 587
- **Ionic channels,** effect of ganglionic blocking drugs in rat submandibular ganglion cells, 151
- **Ionic permeability,** in relation to lesion formation in gastric mucosa of the rat, 325
- **Ionization,** of phenolic amines and a new method for calculating zwitterion constants, 503
- **Isobutylmethylxanthine**, inhibitory responses to in rat and rabbit anococcygeus and bovine retractor penis muscle, effect of ethanol, 189
- **Isoprenaline,** effect on induction of myocardial ornithine decarboxylase in mouse *in vivo*, 479
- , effect on membrane and contractile properties of smooth muscle cell, or on excitatory neuro-effector transmission in dog trachea, 433
- , increase in basal heart rate, effect on prostacyclininduced changes in heart rate in the dog, 243
- , inhibitory responses to in rat and rabbit anococcygeus and bovine retractor penis muscle, effect of ethanol,
- 4-(2-Isopropylamino-1-hydroxyethyl) methanosulfonanilide see MJ1999

K

Kainate, induction of depolarizations, effect of ω-phosphonic α-carboxylic amino acids in isolated spinal cord preparations, 65

Kallidin, effect on short circuit current, transepithelial conductance and ion fluxes across rat colon, 587

Kallikrein, effect on short circuit current on rat colon if added to serosal bath. 587

- **Ketamine**, action on acetylcholine-induced inhibition in the central nervous system of *Helix aspersa*, 353
- -, effect on guinea-pig enteric neurones, 261
- **Kidney,** rabbit, relationship between activity of 9hydroxyprostaglandin dehydrogenase and zonal distribution of renin, 137
- , rat, effect of aspirin, prednisolone and indomethacin on renal function, 87
- rat, effect of converting enzyme inhibition on haemodynamic responses to noradrenaline infusion, 553

L

Lesions, relationship between formation and permeability of rat gastric mucosa to hydrogen ions and other cations, 325

Leukotriene B₄, induction of aggregation and chemokinesis of rat and human polymorphonuclear leukocytes, 383

Linoleic acid, coronary reaction in the rat, 269

Linolenic acid, coronary reactions in the rat, 269

Lithium, effect on resting tension of guinea-pig tracheal smooth muscle *in vitro*, 287

Liver, effect of weight changes on blood alcohol levels in the rat, 251

Longitudinal muscle, guinea-pig ileal, mechanisms of cadmium-induced contraction, 561

Loop diuretics, study of action using the human erythrocyte chlorine-dependent sodium-potassium cotransport system, 183

M

Macrophages, rat peritoneal, inhibition of prostacyclininduced elevation of cyclic adenosine 3',5'monophosphate by prostaglandin E₂, 373

Magnesium ions, effect on endorphin/enkephalin and stress-induced analgesia in the mouse, 389

- , effect on spontaneous and evoked excitatory junction potentials in mouse vas deferens, 599
- modulation of [³H]-guanfacine binding to homogenates of rat brain, 401

Manganese ions, effect on endorphin/enkephalin- and stress-induced analgesia in the mouse, 389

 , effect on [³H]-guanfacine binding to homogenates of rat brain, 401

Maprotoline, effect on acetylcholine synthesis in rat neocortical prisms, 367

MCI-2016, potentiation of noradrenaline in the guinea-pig vas deferens, 377

Mecylamine, effect on action of oxotremorine on dopamine release in slices of rat nucleus accumbens, 359

Medulla/pons, rat, specific [3H]-guanfacine binding to prepared membranes, 409

Melanocyte-stimulating hormone receptor, association with the α_2 -adrenoceptor on the *Anolis* melanophore, 169

Mellitin, effect on short circuit current on rat colon if added to serosal bath. 587

Melperone, effect on rabbit nodal, atrial, Purkinje cells and ventricular potentials, 109

Membrane conductance, transmitter-evoked chloridemediated increases in, blockade by general anaesthetics in *Helix aspersa* neurones, 353

Membrane properties, effect of chlorpromazine or calmodulin in intact and skinned cells of guinea-pig mesenteric artery, 513

- , of smooth muscle cells of canine basilar arteries, effect of diltiazem, 455
- , of smooth muscle cells from dog trachea, effect of catecholamines, 433

Membranes, pre- and post-junctional in the dog trachea, effects of catecholamines, 433

Mepacrine, effect on drug-induced contractions in isolated smooth muscle of the pig, 129

—, effect on responses of rat colon to kinins, 587

Mepyramine, blockade of hypothermia induced by histamine and histamine H₁ receptor agonists in *Mastomys natalensis*, 145

- , effect on histamine inhibition of stimulation-induced release of [3H]-noradrenaline in guinea-pig isolated atrium, 52
- Mersalyl, inhibitory potency on human red cell sodiumpotassium cotransport system, 183

Mesenteric artery, guinea-pig, effect of chlorpromazine on the electrical and mechanical properties of intact and skinned muscle cells, 513

 -- , rat isolated, restoration of vasoconstrictor responses to noradrenaline after α-adrenoceptor blockade, 49

Methergoline, effect on action of (+)-fenfluramine, (+)-norfenfluramine and reserpine on concentrations of 5-hydroxytryptamine and 5-hydroxyindoleacetic acid in rat brain, 525

Methohexitone, effect on the uptake and release of amino acid neurotransmitters in rat thalamic slices, 219

Methoxamine, dose-response curves for, effects of MCI-2016 and cocaine in guinea-pig isolated vas deferens, 377

N-methyl-D-aspartate, induction of depolarizations, effect of ω-phosphonic α-carboxylic amino acids in spinal cord preparations, 65

N-methyl-ethylene-diamine, effect on rat cortical and pallidal neurones, 93

4-Methyl histamine, effect on acetylcholine-induced tone in guinea-pig airways, 531

N-methyl-piperidin-4-yl(R)-2-cyclohexyl-2-hydroxyphenylacetate, effect on acetylcholine synthesis by rat neocortical tissue prisms, 367

N-methyl-cis-2,3-piperidine dicarboxylic acid, effect on spontaneous and amino acid-evoked activity in rat cortical neurones, 441

N-methyl-3-piperidyl benzilate, effect on acetylcholine synthesis in rat neocortical prisms, 367

20-Methylcholanthrene, induction of O-dealkylase activity in the mouse, 123

2-Methylthio-adenosine 5'-monophosphate, effect on human platelet aggregation, 397

2-Methylthio-adensosine 5'-triphosphate, effect on human platelet aggregation, 397

α-Methyltyrosine, ionization and a new method for calculating zwitterion constants, 503

Methysergide, effect on dose-response curves to 5-hydroxytryptamine, 305

 , effect on [3H]-5-hydroxytryptamine binding to rat fore brain, 37

Metiamide, effect on cardiovascular responses to FLA-136 and clonidine in the rat, 13

Metolazone, inhibitory potency on human red cell sodiumpotassium cotransport system, 183

Metoprolol, effect on myocardial ornithine decarboxylase activity in mice in vivo, 479

Mianserin, effect on cardiovascular responses to FLA-136 and clonidine in the rat, 13

Midazolam, modification of antinociceptive effect of morphine in rats, 569

Minaxolone, action on acetylcholine-induced inhibition in the central nervous system of *Helix aspersa*, 353

Miniature endplate currents, effects of some central stimulants at the neuromuscular junction of sartorius muscle of *Bufo marinus*. 493

MJ1999, lack of effect on thermoregulatory response to histamine in *Mastomys natalensis*, 145

- **Morphine,** analgesic action, involvement of 5-hydroxytryptamine in the mouse, 579
- -, effect on dose-response curves to 5hydroxytryptamine in canine coronary arteries, 305
- , effect on noncholinergic contracture in guinea-pig isolated ileum, 199
- , ionization and a new method for calculating zwitterion constants, 503
- , modification of antinociceptive effects by centrally administered diazepam and midazolam in the rat, 569
- —, production of tolerance and physical dependence in rat by simple administration in drinking water, 485

Motor nerve stimulation, responses in rat anococcygeus muscle, effect of ethanol, 189

Motor responses, in rat and rabbit anococcygeus and bovine retractor penis muscle, effect of ethanol, 189

retractor penis muscle, effect of ethanol, 189

Muscarinic autoreceptors, central presynaptic, evidence for

similarity to postsynaptic muscarinic receptors, 367 **Muscarinic cholinoceptor**, interaction with phencyclidine in

isolated guinea-pig ileum, 261

Muscarinic receptors, postsynaptic, evidence for pharmacological similarity to central presynaptic mus-

carinic autoreceptors, 367

Muscle cells, intact or skinned, effect of calmodulin or chlorpromazine on electrical and mechanical properties, in guinea-pig mesenteric artery, 513

Muscle rigidity, spastic mouse, effect of drugs in animals with no histological lesion, 23

Myocardium, rat, correlation of Org 6001 levels with its antiarrhythmic effects, 319

N

Naloxone, effect on cardiovascular responses to FLA-136 and clonidine in the rat, 13

- -, effect on stress-induced analgesia in the mouse, 389
- , reversal of phencyclidine-induced inhibition of contractions in guinea-pig enteric neurones, 261
- , with hexamethonium effect on noncholinergic contracture and on responses to substance P in isolated guineapig ileum, 199

Naproxen, inhibition of responses to arachidonic acid in isolated perfused rat heart, 269

Neocortical prisms, rat, effect of antimuscarinic agents on acetylcholine synthesis, 367

Nephritis, nephrotoxic serum-induced, effects of aspirin, prednisolone and indomethacin in the rat, 87

Nephrotoxic serum, induction of nephritis, effects of aspirin, prednisolone and indomethacin in the rat, 87

Neuromuscular junction, postsynaptic effects of some central stimulants in sartorius muscle of cane toad (*Bufo marinus*), 493

Neurones, Helix aspersa, effects of general anaesthetics on, 353

Neurotransmitters, uptake and release in rat thalamic slices, effect of anaesthetics on, 219

Nicotinic receptor, effects of tubocurarine competition on the kinetics of agonist action on, 77

Nitroprusside, effect on regulation of blood pressure in the conscious rabbit, 417

-, increase in basal heart rate, effect on prostacyclin-

induced changes in heart rate in the dog, 243

Nomifensine, effect on acetylcholine synthesis in rat neocortical prisms, 367

Non-adrenergic inhibitory responses, effect of desensitization to adenosine 5'-triphosphate and adenosine on, in the circular muscle of the rabbit colon, 311

Non-steroidal anti-inflammatory agents, effect on responses to arachidonic acid of isolated perfused rat heart, 269

Noncholinergic contractures, effects of opioids in guineapig isolated ileum, 199

Nonylimidazole, effect on thromboxane synthetase and cyclo-oxygenase in rabbit platelets, 623

Noradrenaline, α -adrenoceptor blockade of vasoconstrictor responses to, effect of prostaglandin E_2 in rat isolated mesenteric artery, 49

- , effect of α -adrenoceptor blockade on plasma levels in the conscious rabbit, 417
- , effect of ethanol on hypothalamic levels in guinea-pigs exposed to severe cold, 613
- , effect of MCI-2016 on release in guinea-pig vas deferens, 377
- , effect of potassium ion stimulated release on 5hydroxytryptamine-induced contractions in canine isolated coronary arteries, 305
- , effect on action of melanocyte-stimulating hormone in Anolis, 169
- , effect on amylase release and adenosine 3',5'monophosphate accumulation in rat parotid and guinea-pig submandibular glands, 633
- —, effect on binding of [³H]-dopamine to cerebral cortical membrane fractions of the rat, 37
- , effect on calcium exchange and contraction in rat mesenteric arteries, 229
- , effect on membrane and contractile properties of smooth muscle cell, or on excitatory neuro-effector transmission in dog trachea, 433
- , haemodynamic effects in rat kidney, effects of teprotide, 553
- , induction of contraction in rabbit ear artery, effect of taurine, 605
- , motor response to in rat anococcygeus muscle, effect of ethanol, 189
- , plus phenoxybenzamine, effect on contractile responses of rat anococcygeus, 549
- [3H]-noradrenaline, effect of histamine on resting and stimulation-induced release in guinea-pig isolated atrium, 52
- (+)-Norfenfluramine, effect on concentrations of 5hydroxytrytamine and 5-hydroxyindoleacetic acid in rat brain, 525

Normorphine, effect on spontaneous and evoked excitatory junction potentials in mouse vas deferens, 599

Nucleus accumbens, rat, cholinergic action, modulation of dopamine and acetylcholine release, 359

o

Oleic acid, coronary reaction in the rat, 269

Olfactory cortex, guinea-pig, effect of pentobarbitone, procaine and tetrodotoxin on synaptic transmission, 639 Opiate receptors, involvement in cardiovascular responses to clonidine in the rat, 13

Opiates, displacement of binding to guinea-pig ileum by phencyclidine and related drugs, 261

-, involvement of divalent metal ions in the actions, 389

Opioids, effects on noncholinergic excitatory responses of the guinea-pig isolated ileum, 199

ORG 6001, antiarrhythmic effects in rats, correlation with plasma and tissue drug concentrations, 319

Ornithine decarboxylase, regulation of induction in mouse myocardium by β_2 -adrenoceptors, 479

Ouabain, effect on actions of angiotensin II on electrical and mechanical activity of the vascular smooth muscle of the rat portal vein, 425

 —, effect on [³H]-5-hydroxytryptamine binding to rat fore brain, 37

 , effect on relaxant effects of lithium in guinea-pig tracheal smooth muscle in vitro, 287

Oxidation peaks, identification by differential pulse voltammetry, 539

Oxotremorine, action on release of dopamine and acetylcholine from rat nucleus accumbens, 359

 , effect on acetylcholine synthesis in rat neocortical prisms, 367

Oxygen, effect of intracerebroventricular and intrahypothalamic injections of Δ^9 -tetrahydrocannabinol on consumption in mice, 409

P

Pallidal neurones, effect of ethylenediamine analogues and γ-aminobutyric acid in the rat, 93

Papain, inhibition by sodium aurothiomalate mediated by exchange reactions, 333

Papillary muscles, guinea-pig, effect of harmala alkaloids on transmembrane potentials, 207

, rabbit, effect of cibenzoline on action potential duration, 469

Parotid gland, rat, effects of noradrenaline, prenalterol and terbutaline on release of amylase and cyclic adenosine 3',5'-monophosphate levels, 633

 - , rat, effects of haloperidol analogues on αadrenoceptors in vitro, 213

-, rat, effects of substance P-related peptides, 341

2-(Pentan-1-yl)thio-adenosine 5'-monophosphate, effect on human platelet aggregation, 397

Pethidine, analgesic action, involvement of 5hydroxytryptamine in the mouse, 579

Pentobarbitone, action on synaptic transmission in the olfactory cortex of the guinea-pig, 639

-, effect on muscle rigidity in the spastic mouse, 23

Pentylenetetrazol, induction of seizures in rats, effect of β-adrenoceptor antagonists, 441

Peptides, substances P-related, relative activities in guineapig ileum and rat parotid gland *in vitro*, 341

Periaqueductal grey, administration of midazolam, effect on analgesic effects of morphine, 569

PGI₂ see Prostacyclin

pH, effect on ionization of phenolic amines, 503

Phaeochromocytoma cells, guinea-pig, effect of MCI-2106 and cocaine on noradrenaline uptake, 377

Phencyclidine, and its derivatives, effect on enteric neurones from isolated guinea-pig ileum, 261

Phenobarbitone, effect on muscle rigidity in the spastic mouse, 23

, induction of O-dealkylase activity in mouse, 123

Phenoxybenzamine, effect on the contractile responses of the rat anococcygeus to noradrenaline or Sgd 101/75, 549

 , inhibition of noradrenaline-induced vasoconstriction, effect of prostaglandin E₂ in rat mesenteric artery, 49

Phentolamine, blockade of noradrenaline-induced vasconstriction in rat isolated mesenteric artery, effect of prostaglandin E₂, 49

 , effect on actions of adrenaline on melanocytestimulating hormone activity, 169

 , effect on dose response curves to 5-hydroxytryptamine in canine coronary arteries, 305

 , effect on presynaptic effects of clonidine in guinea-pig atrium, 617

 -- , effect on regulation of blood pressure in the conscious rabbit, 417

 , supression of effects of catecholamines on membrane properties of smooth muscle cell of dog trachea, 433

[3H]-phentolamine, displacement from human platelet membrane by haloperidol analogues, 213

Phenylephrine, effect on regulation of blood pressure in the conscious rabbit, 417

ω-Phosphonic α-carboxylic amino acids, effect on electrically evoked and excitant amino acid-induced responses in isolated spinal cord preparations, 65

Picrotoxin, effect on barbiturate-induced enhancement of potassium ion stimulated-release of amino acids in rat thalamic slices, 219

Pimozide, effect on [3H]-dopamine binding to cerebral cortical membrane fractions of the rat, 37

Pindolol, effects of isomers on pentylenetetrazol-induced convulsions in the rat, 441

Piperazine, effect on rat cortical and pallidal neurones, 93 **Piperidine**, effect on rat cortical and pallidal neurones, 93

Piretanide, inhibitory potency on human red cell sodium potassium cotransport system, 183

Plasma, rabbit, effect of α-adrenoceptor antagonists on noradrenaline levels, 417

-- , rat, correlation of Org 6001 levels with its antiarrhythmic effects, 319

rat, effect of noradrenaline on renin levels, 553

Platelets, human, effect of prostaglandin E_1 and adenosine on aggregation induced by adenosine 5'-O-(thiodiphosphate) and adenosine 5'-O-(2-thiodiphosphate), 257

—, human, inhibition of aggregation by 2-alkylthio analogues of adenosine 5'-monophosphate and adenosine 5'-triphosphate, 397

— , human, interactions with $\alpha\text{-adrenoceptors}$ in membranes, 213

 , human, uptake of 6-flouro-5-hydroxytryptamine and 4,6-diflouro-5-hydroxytryptamine into releasable and non-releasable compartments, 237

 , rabbit, technique for monitoring aggregation and simultaneously measuring collagen- or archidonic acidinduced thromboxane A₂ and prostaglandin release, 623

Portal vein, rat, mechanism of action of angiotensin II on

excitation-contraction coupling, 425

Potassium, dose-response curves for, effects of MCI-2016 and cocaine in isolated guinea-pig vas deferens, 377

- -, induction of contractions, effects of chlorpromazine or calmodulin in intact and skinned cells of guinea-pig mesenteric artery, 513
- -, induction of contractions in rabbit ear artery, effect of taurine, 605
- induction of contractions in smooth muscle cells of canine basilar artery, effect of diltiazem, 455

Potassium ions, induction of contractions in pig isolated smooth muscle, effects of inhibitors of arachidonic acid metabolism, 129

- -, induction of release of acetylcholine and dopamine, effect of oxotremorine and acetylcholine in slices of rat nucleus accumbens, 359
- —, modulation of [3H]-guanfacine binding to homogenates of rat brain, 401
- , α₁-stimulated release, effect of haloperidol analogues in rat parotid slices, 213
- stimulation of release of amino acid neurotransmitters in rat thalamic slices, 219

Practolol, effects of isomers on pentylenetrazol-induced convulsion in the rat, 441

Prazosin, effect on cardiovascular responses to FLA-136 and clonidine in the rat, 13

- -, effect on regulation of blood pressure in the conscious rabbit, 417
- -, effect on the action of clonidine and adrenaline on melanocyte-stimulating hormone activity in Anolis,

Prednisolone, effect on nephrotoxic serum nephritis in the rat, 87

Prenalterol, effect on amylase release and adenosine 3', 5'-monophosphate accumulation in rat parotid and guinea-pig submandibular glands, 633

Procaine, actions on synaptic transmission in the olfactory cortex of the guinea-pig, 639

-, effect on relaxant effects of lithium in guinea-pig tracheal smooth muscle in vitro, 287

Propranolol, abolition of atropine blockade of 5hydroxytryptamine-induced contracture of trachea, 433

- , blockade of myocardial ornithine decarboxylase activity in mouse in vivo, 479
- -, changes in responses of guinea-pig airways in vivo and in vitro during development, 531
- -, effects of isomers on pentylenetetrazol-induced convulsions in the rat, 441
- -, effect on relaxant effects of lithium in guinea-pig tracheal smooth muscle in vitro, 287
- supression of effects of catecholamines on membrane properties of smooth muscle cell of dog trachea, 433

Propylene glycol, effect on muscle rigidity in the spastic mouse, 23

Prostacyclin, effect in isolated perfused rat heart, 269

- -, effect on heart rate, effect of basal heart rate in the dog,
- -, induction of elevated levels of cyclic 3', 5'monophosphate in elicited populations in rat peritoneal macrophages, effect of prostaglandin E2, 373
- -, stimulation of renin release in slices of rabbit renal cortex, 137

Prostaglandin A₂, effect on aspirin-induced lesions and ionic permeability in rat gastric mucosa, 325

Prostaglandin E₁, differential inhibition of human platelet aggregation induced by adenosine 5'-O-(1thiodiphosphate) and adenosine 5'-O-(2thiodiphosphate), 257

-, 6-oxo, stimulation of renin release in rabbit renal cortex, 137

Prostaglandin E₂, effect in isolated perfused rat heart, 269

- —, effect on aspirin-induced lesions and ionic permeability in rat gastric mucosa, 325
- -, effect on drug-induced contractions in isolated tracheal smooth muscle of the pig, 129
- -, effect on heart rate in some dogs, dependence on basal heart rate, 243
- -, effect on prostacyclin-induced elevation of cyclic adenosine 3', 5'-monophosphate in elicited populations of rat peritoneal macrophages, 373
- —, effect on responses to noradrenaline after α adrenoceptor blockade in isolated rat mesenteric artery, 49

Prostaglandin F2, effect on calcium exchange and contraction in rat mesenteric arteries, 229

-, 6-oxo, stimulation of renin release in slices of rabbit renal cortex, 137

Prostaglandin G₂, role in mediation of platelet aggregation induced by collagen or arachidonic acid in rabbits, 623

Prostaglandin H₂, role in mediation of platelet aggregation induced by collagen or arachidonic acid in rabbits, 623

-, 11α, 9α-epoxymethano, induction of human platelet aggregation, 397

Prostaglandin I2 see Prostacyclin

Proteinuria, development after nephrotoxic serum injection, effect of aspirin, prednisolone and indomethacin in the rat, 87

P₁-purinoceptors, evidence for stereospecificity of in the guinea-pig, 101

Purkinje cells, rabbit, effect of melperone, on action potential duration, 109

-, rabbit, effect of cibenzoline on action potential duration, 469

Pyrazine, effect on rat cortical and pallidal neurones, 93

2-Pyridylethylamine, contraction of pig isolated smooth muscle, effect of inhibitors of arachidonic acid metabolism, 129

Q

Quinuclidinyl benzilate, effect on acetylcholine synthesis by rat neocortical tissue prisms, 367

Quisqualate, induction of depolarizations, effect of ω phosphonic α-carboxylic amino acids in spinal cord preparations, 65

R

Rectal temperature, effect of ethanol given to guinea-pigs exposed to severe cold, 613

effect of intracerebroventricular and intrahypothalamic injections of Δ^9 -tetrahydrocannabinol in mice, 409

- **Relaxation**, produced by γ-aminobutyric acid in rabbit basilar artery, 177
- **Renal cortex,** rabbit, stimulation of renin release by 6-oxoprostaglandin E_1 and prostacyclin, 137
- **Renin,** effect of noradrenaline infusion on plasma levels in rat, 553
- , stimulation of release by 6-oxo-prostaglandin E₁ and prostacyclin in slices of rabbit renal cortex, 137
- **Reserpine,** effect on concentrations of 5-hydroxytryptamine and 5-hydroxyindoleacetic acid in rat brain, 525
- Resting tension, of smooth muscle cells of dog trachea, effect of catecholamines, 433
- Retractor penis muscle, bovine, effect of ethanol on inhibitory and motor responses, 189
- Roll-6896, effect on muscle rigidity in the spastic mouse, 23
 68 Rubidium ion fluxes, in response to kinins in rat colon, 587
- **Rubidium ions,** release from rat parotid gland by substance P in vitro, 341

S

- **Scopolamine,** effect on acetylcholine synthesis by rat neocortical tissue prisms, 367
- **Sedation,** effect of FLA-136 and clonidine in the rat, 13
- Serum albumin, bovine, involvement in exchange reactions leading to inhibition of trypsin by sodium aurothiomalate. 333
- Sexual dimorphism, androgen-induced effect on high affinity binding in different areas of rat brain, 37
- Sexual cycle, effect on [3H]-dopamine and [3H]-5hydroxytryptamine binding in different areas of rat brain, 37
- **Sgd 101/75,** plus phenoxybenzamine effect on contractile responses of rat anococcygeus, 549
- Short circuit current, measurement of response to kinins in isolated rat colon, 587
- Sinoaortic denervation, effect on changes in blood pressure in conscious rabbits after treatment with α-adrenoceptor antagonists, 417
- Sinus node, rabbit, effect of cibenzoline on action potential duration, 469
- , rabbit, effect of melperone on action potential duration, 109
- , rabbit and dog, site of action of bepridil-induced reduction of heart rate, 293
- **Skeletal muscles, rat, correlation of Org 6001 levels with its antiarrhythmic effects, 319**
- Skin, mammalian, cytochrome P-450-dependent Odealkylase activity, 123
- Smooth muscle, guinea-pig trachea, relaxant effects of lithium in vitro, 287
- , rat portal vein, action of angiotensin II on electrical and mechanical activity, 425
- **Sodium,** effect of lowered extracellular levels on relaxant effects of lithium in guinea-pig tracheal smooth muscle, 287
- **Sodium aurothiomalate,** inhibition of trypsin and papain, mediation by exchange reactions, 333
- **Sodium chloride-free solution,** induction of contractions, effects of calmodulin or chlorpromazine in intact or

- skinned muscle cells of guinea-pig mesenteric artery, 513
- , induction of contractions of smooth muscle cells of cainine basilar artery, effects of diltiazem, 455
- ²²Sodium ion fluxes, in response to kinins in rat colon, 587
 Sodium ions, modulation of [³H]-guanfacine binding to homogenate of rat brain, 401
- Sodium nitroprusside, inhibitory responses to in rat and rabbit anococcygeus and bovine retractor penis muscle, effect of ethanol, 189
- Sodium-potassium cotransport system, chlorine-dependent in human erythrocyte, possible model for studying the action of loop diuretics, 183
- Sodium-potassium pump, involvement in the action of angiotensin II on the vascular smooth muscle of rat portal vein, 425
- **Sodium salicylate,** effect on drug-induced contractions in isolated tracheal smooth muscle of the pig, 129
- Spinal cord, frog and immature rat, effect of ω -phosphonic α -carboxylic amino acids on electrically evoked and excitant amino acid-induced responses, 65
- , rat, specific [³H]-guanfacine binding to prepared membranes, 401
- **Spiperone**, effect on [³H]-dopamine binding to cerebral cortical membrane fractions of the rat, 37
- Steroid hormones, neonatal exposure to, effect on numbers of dopamine binding sites in rat cerebral cortex and amygdala, 37
- Stress, induction of analgesia, effects of divalent cations, cation chelator and an ionophore in the mouse, 389
- Stretch reflexes, hyperactivity ameliorated by drugs which enhance γ-aminobutyric acid-mediated presynaptic inhibition of such pathways, 23
- **Striatum,** mouse, effect of γ-hydroxybutyrate on levels of tyramine, dopamine and homovanillic acid, 447
- , rat, identification of oxidation peaks by differential pulse voltammetry, 539
- , rat, specific [³H]-guanfacine binding to prepared membranes, 401
- Strontium ions, effect on acetylcholine release induced by cadmium in ileal longitudinal muscle of guinea-pig, 561
- Submandibular gland, guinea-pig, effect of noradrenaline, prenalterol and terbutaline on amylase release and cyclic adenosine 3', 5'-monophosphate accumulation, 633
- Submandibular ganglion cells, action of ganglionic blocking drugs in the rat, 151
- Substance P, effects of opioids of enteric release in the guinea-pig, 199
- , mediation of atropine-resistant 20 Hz contracture in guinea-pig isolated ileum, 199
- Substance P analogues, relative activities in guinea-pig ileum and rat parotid gland, in vitro, 341
- Sulphate ions, in serosal bath, effect on responses of rat colon to kinins, 587
- Sulphinpyrazone, effect on vasoconstrictor phase of response to isolated perfused rat heart to arachidonic acid. 269
- Sympathetic denervation, chemically induced effect on 5hydroxytryptamine-induced contractions in canine isolated coronary arteries, 305
- **Synaptic responses**, effect of ganglionic blocking drugs on submandibular ganglion cells, 151

Synaptic transmission, in olfactory cortex of the guinea-pig, effect of pentobarbitone, procaine and tetrodotoxin, 639

T

- Taurine, effect on high potassium- and noradrenalineinduced contractions in rabbit ear artery, 605
- **Telencephalon,** rat, effect of (+)-fenfluramine, (+)-norfenfluramine and reserpine on concentrations of indoles, 525
- **Temperature,** effect on cadmium-induced contractions in ileal longitudinal muscle of guinea-pig, 561
- —, effect on ionization of phenolic amines, 503
- **Teprotide,** effect on renal haemodynamic responses to noradrenaline infusion in the rat, 553
- **Terbutaline,** effect on amylase release and adenosine 3', 5'-monophosphate accumulation in rat parotid and guinea-pig submandibular glands, 633
- , effect on induction of myocardial ornithine decarboxylase in mice in vivo, 479
- **Tetraethylammonium,** effect on increased action potential discharge in vascular smooth muscle of rat portal vein, 425
- **Tetrodotoxin,** actions on synaptic transmission in the olfactory cortex of the guinea-pig, 639
- , effect on cadmium-induced contraction and acetylcholine release in ileal longitudinal muscle of guineapig, 561
- , effect on noncholinergic contracture in guinea-pig isolated ileum, 199
- , effect on spontaneous and evoked excitatory junction potentials in mouse vas deferens, 599
- Thalamus, rat, specific [³H]-guanfacine binding to prepared membranes, 409
- **Theobromine,** effect on scheduled controlled responding in rats, 451
- Theophylline, effect on log concentration-response curve of adenosine and its analogues in driven left atrium, trachea and transmurally stimulated ileum of the guinea-pig, 101
- -, effect on scheduled controlled responding in rats, 451
- **Thermoregulation,** effect of intracerebroventricular and intrahypothalamic injections of Δ^9 -tetrahydrocannabinol in mice, 409
- —, role of histamine receptors in central mechanisms in Mastomys natalensis, 145
- 1-1-(2-Thienyt)-cyclohexylpiperidine, effect on guinea-pig enteric neurones, 261
- **Thiopentone,** action on acetylcholine-induced inhibition in the central nervous system of *Helix aspersa*, 353
- , effect on the uptake and release of amino acid neurotransmitters in rat thalamic slices, 219
- **Thioridazine,** effect on acetylcholine synthesis in rat neocortical prisms, 367
- **Thromboxane A₂**, role in mediation of platelet aggregation induced by collagen or arachidonic acid in rabbits, 623
- **Thromboxane synthetase,** inhibition by imidazole derivatives in the rabbit, 623
- **Timilol,** effects of isomers on pentylenetetrazol-induced convulsions in the rat, 441

- **Tolazoline**, blockade of noradrenaline-induced vasconstriction in rat isolated mesenteric artery, effect of prostaglandin E₂, 49
- **Tolerance,** to morphine, production in rat by administration in drinking water, 485
- **Trachea,** dog, dual effects of catecholamines on pre- and post-junctional membranes, 433
- -, guinea-pig, effect of adenosine and its analogues, 101
- , guinea-pig, relaxant effects of lithium on smooth muscle, 287
- Transepithelial conductance, measurement of response to kinins in isolated rat colon, 587
- **Transmural electrical stimulation,** effects of MCI-2016 on contractile responses to, in guinea-pig vas deferens, 377
- —, production of contraction in rabbit basilar artery, effect of γ-aminobutyric acid and agonists, 177
- **Triamterine**, inhibitory potency on human red cell sodiumpotassium cotransport system, 183
- **Tricylglycerols,** effect of ethanol on serum levels in guineapig exposed to severe cold, 613
- **Trihexyphenidyl,** effect on acetylcholine synthesis in rat neocortical prisms, 367
- **Trimetaphan,** action on synaptic responses of rat submandibular ganglion cells, 151
- **Trypsin,** inhibition by sodium aurothiomalate mediated by exchange reactions, 333
- **Tubocurarine,** action on synaptic responses of rat submandibular ganglion cells, 151
- , effect of competition on the kinetics of agonist action on the nicotinic receptor, 77
- (+)-Tubocurarine, ionization and a new method for calculating zwitterion constants, 503
- Tween 80, effect on rectal temperature and oxygen consumption in mice, 409
- **Tyramine**, contractile response of guinea-pig vas deferens to, effect of MCI-2016, 377
- , effect of γ-hydroxybutyrate on mouse striatal levels,
 447

\mathbf{U}

- UP 339-01 (cibenzoline), effect on potentials of cardiac tissues in the rabbit, 469
- Urethane, effect on the uptake and release of amino acid neurotransmitters in rat thalamic slices, 219

V

Vagus nerve, dog and guinea-pig, effect of angiotensin II and III on action on the heart, 9

Valproate, effect on muscle rigidity in the spastic mouse, 23 Vas deferens, guinea-pig isolated, effect of MCI-2016 on noradrenaline release, 377

- , mouse, effect of divalent cations and normorphine on spontaneous and evoked excitatory junction potentials, 599
- Vasoconstriction, induced in isolated perfused rat heart by arachidonic acid, 269

- , noradrenaline-induced, effect of prostaglandin E₂ on α-adrenoceptor blockade in rat isolated mesenteric artery, 49
- Vasodilatation, arachidonic acid-induced in rat isolated perfused heart, 269
- , diliazem-induced in smooth muscle cells of canine basilar arteries, 455
- Ventricle, rabbit, effect of melperone on action potential duration in muscle cells, 109
- , rabbit, effect of cibenzoline on action potential duration, 469
- -, rat, effect of Org 6001 on fibrillation, 319
- Verapamil, effect on relaxant effect of lithium in guinea-pig tracheal smooth muscle in vitro, 287
- , inhibition of noradrenaline-induced vasoconstriction, effect of prostaglandin E₂ in rat mesenteric artery, 49
- Vinblastine, effect on aggregation and chemokinesis in rat or human polymorphonuclear leukocytes induced by leukotriene B₄, 383
- Voltammetry, differential pulse, identification of oxidation peaks in rat striatum and frontal cortex, 539

\mathbf{x}

Xanthines, effect on scheduled controlled responding in rats, 451

Y

Yohimbine, blockade of effects of clonidine and adrenaline on melanocyte-stimulating hormone in *Anolis*, 169

- , blockade of noradrenaline-induced vasoconstriction in rat isolated mesenteric artery, effect of prostaglandin E₂, 49
- , effect on cardiovascular responses to FLA-136 and clonidine in the rat, 13
- , effect on potassium-evoked release of noradrenaline in the presence of cocaine in guinea-pig isolated vas deferens, 377
- , effect on regulation of blood pressure in the conscious rabbit, 417

Z

Zwitterion constants, estimation for phenolic amines, 503