A

- A23187, calcium ionophore, effect of, on release of a slow-reacting substance from guinea-pig lungs, 67
- Acebutolol, effect of, on hepatic mixed-function oxygenases in the rat, 451P
- Acetylcholine, assay of, released from bovine tracheal smooth muscle during stimulation of intrinsic nerves, 464P
- contractions of rat ileum induced by, modulation of, by betamethasone, 448P
- —, release of, from phrenic nerve-hemidiaphragm preparations of rat and mouse, chick biventer cervicis muscle preparation and aneural cultures of embryonic chick skeletal muscle, effect of venom of the green mamba, *Dendrospis angusticeps*, on, 199
- —, control excitation in rat corticofugal neurones produced by, effect of DL-α-aminoadipate on, 545
- effects of benzodiazepines on neuronal responses to, in rat cerebral cortex, 563
- responses of isolated rat uterus to, effect of isoprenaline on, 13
- —, excitatory actions of, in the heart, 3
- release of, from guinea-pig ileum, effects of inert gases and other general anaesthetics on, 229
- release of, from guinea-pig ileum, effects of high pressure helium and nitrogen on, 221
- —, acid secretion induced by, in the isolated whole stomach of the rat, effect of calcium on, 123
- γ-Acetylenic γ-aminobutyric acid, biphasic effect of, on haloperidol-induced catalepsy in rat, 442P
- Acetylsalicyclic acid, comparison of abilities of, flurbiprofen and indomethacin to inhibit the release reaction and prostaglandin synthesis in human blood platelets, 73
- Acute phase proteins, correlation between rise in, and histological evidence of ulceration in the rat following indomethacin treatment, 450P
- Adenine nucleotides, enantiomers of 2-azido analogues of, relaxation of isolated taenia coli of guinea-pig by, 153
- Adenohypophysis, inhibition by pentobarbitone and urethane of the *in vitro* response of, to luteinising hormone-releasing hormone in male rats, 277
- Adenosine, may mediate neuronal depressant effects of morphine, 476P
- , prejunctional interaction of, with adenosine in rat vas deferens, 492P
- —, enantiomers of 2-azido analogues of, relaxation of isolated taenia coli of guniea-pig by, 153
- --, effect of, on longitudinal muscle from rabbit duodenum and guinea-pig taenia caeci and fundic strip, effect of theophylline on, 301
- relaxation of guinea-pig fundic strip by, lack of antagonism by theophylline or ATP treatment, 293
- Adenosine diphosphate, platelet release reaction induced by, comparison of abilities of acetylsalicyclic acid, flurbiprofen and indomethacin to inhibit, 73
- Adenosine 5'-diphosphate, enantiomers of 2-azido analogues of, relaxation of isolated taenia coli of guinea-pig by, 153
- Adenosine monophosphate, dibutyryl cyclic, effect of, on

- chemotaxis and chemokinesis of rat polymorphonuclear leucocytes, 472P
- cyclic, production of, in rat nucleus accumbens homogenates, effects of dopamine receptor agonists and antagonists on, 430P
- -, 5', enantiomers of 2-azido analogues of, relaxation of isolated taenia coli of guinea-pig by, 153
- -- , 3',5'-cyclic, effects of, and methyl xanthines on spinal transmission of nociceptive information in cat, 51
- 3',5', dibutyryl cyclic, acid secretion induced by, in the isolated whole stomach of the rat, effect of calcium on, 123
- —, 3',5', dibutyryl cyclic, effect of, on release of arachidonic acid from fat cell ghosts from rabbit adipose tissue, 393
- Adenosine triphosphate, effect of, on longitudinal muscle from rabbit duodenum and guinea-pig taenia caeci and fundic strip, effect of theophylline on, 301 effect of, on atrial fibrillation, 3
- —, relaxation of guinea-pig fundic strip by, lack of antagonism by theophylline or ATP treatment, 293
- 5', enantiomers of 2-azido analogues of, relaxation of isolated taenia coli of guinea-pig by, 153
- Adenosine triphosphatase, synaptosomal, inhibition of, by PGE_1 may be dependent on a soluble factor, 455P
- Adenylate cyclase, dopamine-sensitive, in rat nucleus accumbens homogenates, effects of dopamine receptor agonists and antagonists on, 430P
- Adipose tissue, rabbit, fat cell ghosts from, effects of glucocorticosteroids on the distribution and mobilization of arachidonic acid in, 393
- Adrenal hyperaemia, induced by adrenocorticotrophic hormone in anaesthetized dog, failure of indomethacin to alter, 217
- Adrenaline, effect of, on isolated strips of rabbit splenic artery, 474P
- effect of, on the rat isolated uterus, 466P
- contraction of vascular smooth muscle induced by, effect of urethane on, in rat aortic strips and portal vein segments, 255
- concentration of, in coronary sinus of spinal dogs, effects of clonidine, prazosin and phentolamine on, during cardioaccelerator nerve stimulation, 283
- (-)-Adrenaline, effect of, on ouabain receptor binding in dog heart, 345
- α₂-Adrenoceptor antagonist, is WB 4093 a selective?, 487P α-Adrenoceptor-blocking properties, presynaptic, among triand tetracyclic antidepressant drugs in mouse vas deferens, 511
- α-Adrenoceptor stimulation, central, effects of, in spontaneously hypertensive rats, involve opiate receptors, 161
- β-Adrenoceptor agonist activity, of labetalol on the isolated uterus of the rat, 13
- **β-Adrenoceptor antagonist,** partial, a novel, (ICI 118, 587), cardiovascular activity of, in the dog, 412P
- β-Adrenoceptor antagonists, analysis of the activity and distribution of, in the rat using an ex vivo receptor binding assay, 415P

- --, effects of, on the hepatic mixed-function oxygenases in the rat, 451P
- α-Adrenoceptor blocking drug, effect of, on noradrenergic transmission in the isolated aorta of the rabbit and atria of the guinea-pig, 535
- β-Adrenoceptor-blocking drugs, effects of, on propranololinduced bronchospasm in the guinea-pig and rat, 488P
- antagonism by, of cardiovascular actions of isoprenaline in the rat, 367
- α-Adrenoceptors, further sub-classification of, in the cardiovascular system, vas deferens and anococcygeus muscle of the rat, 421P
- presynaptic, sensitive and insensitive to oxymetazoline, in isolated rat atria, 419P
- postsynaptic, evidence for two distinct types of, in vascular smooth muscle in vivo in anaesthetized cats and pithed rats, 207
- —, presynaptic, an examination of the negative feedback function of, in a vascular tissue, 401
- presynaptic, effect of amitryptyline on, in the dog saphenous vein, 422P
- cardiac presynaptic, in spinal dogs, effects of clonidine, prazosin and phentolamine on, during cardioaccelerator nerve stimulation, 283
- α₂-Adrenoceptors, mediate clonidine-induced sedation in the rat, 133
- **β-Adrenoceptors,** homogeneity of, on rat erythrocytes, 479P
- 479P

 -- subdivision of, in cardiovascular system of the rat, 367
- cardiac, in pig heart, effects of temperature and ionic environment on antagonist binding to, 416P
- β_1 -Adrenoceptors, relaxant responses of sheep coronary arteries to catecholamines and sympathetic nerve stimulation mediated by, effects of uptake inhibitors on, 553
- , stimulation of, as effect of 7-propyl-theophyllinedopamine on cat myocardium in vivo, 239
- β_2 -Adrenoceptors, peripheral, effect of 7-propyl-theophylline-dopamine on, in the cat, 239
- **α- and β-adrenoceptors,** in rat isolated uterus, characterization of, 466P
- Adrenocorticotrophic hormone, adrenal hyperaemia induced by, in the anaesthetized dog, failure of indomethacin to alter, 217
- effect of, on distribution and mobilization of arachidonic acid in fat cell ghosts, 393
- ADTN, effect of, on rat nucleus accumbens, 430P
- Aglycones, effects of, on ouabain receptor binding in dog heart, 345
- Aldosterone, urinary excretion of, during amiloride administration to congestive heart failure patients, time-related changes in, 494P
- , effect of, on ouabain receptor binding in dog heart, 345
- Althesin, as an anaesthetic in experimental animals susceptible to halothane-initiated malignant hyperthermia, 425P
- Amiloride, administration of, in saline-loaded rats, urinary magnesium excretion during, 493P
- time-related changes in urinary aldosterone and electrolyte excretion during administration of, to congestive heart failure patients, 494P

- Amines, brain, neuroleptics which deplete, influence of cerebral 5-hydroxytryptamine on catalepsy induced by, in rat and mouse, 309
- Amino acids, excitatory, selective antagonism by benzodiazepines of neuronal responses to, in rat cerebral cortex, 563
- —, as neurotransmitters of corticofugal neurones in the rat, a comparison of glutamate and aspartate, 545
- excitatory, antagonism of responses induced by, in the isolated spinal cord of the frog, 591
- Amino group, primary, replacement of, by a hydroxyl group, biological activity of analogues of oxytocin and lysine-vasopressin with, in rat uterus, mammary strip and mammary gland, 575
- DL-α-Aminoadipate, effects of, on excitatory responses produced in rat corticofugal neurones by aspartate and glutamate, 545
- D-α-Aminoadipic acid, effect of, on synaptic activity in isolated hemisected spinal cords of frogs, 591
- (+)-cis-3-Aminocyclohexane carboxylic acid, effect of, on binding of γ-aminobutyric acid to calf superior cervical ganglia, 445P
- γ-Aminobutyric acid, effects of fluphenazine decanoate on brain concentration of, in socially reared and isolated young rats, 439P
- processes dependent on, in rat brain, effects of benzodiazepines on, 440P
- metabolism of, in vivo in the mouse, effects of sodium valproate and ethanolamine-O-sulphate on, 441P
- , antagonism of post-synaptic actions of, in guinea-pig olfactory cortex by leptazol, 443P
- in chick brain, effect of ethyl-N-phthalimidoxy acetate on, 441P
- responses of neurones of rat cerebral cortex to, effects of diazepam and chlordiazepoxide on, 563
- γ-Aminobutyric acid mimetic drugs, biphasic effect of direct, on haloperidol-induced catalepsy in rat, 442P
- effects of, on binding of γ-aminobutyric acid to calf superior cervical ganglia, 445P
- γ-Aminobutyric acid receptor, a novel type of, in rat atria and mouse vas deferens, baclofen is a selective agonist for, 444P
- γ-Aminobutyric acid receptor agonist, (muscimol), antagonizes antinociceptive effect of morphine in the rat, 103
- γ-Aminobutyric acid receptor binding, sodium-independent, in calf peripheral nervous tissue, 445P
- **2-Amino-6,7-dihydroxy-1,2,3,4-tetrahydronaphthalene,** (+)- and (-)- enantiomers of, effects of, on rat nucleus accumbens, 430P
- , effect of, on isolated strips of rabbit splenic artery, 474P
- Amino-oxyacetic acid, biphasic effect of, on haloperidolinduced catalepsy in rat, 442P
- 3-Aminopropane sulphonic acid, effect of, on binding of γ-aminobutyric acid to calf superior cervical ganglia, 445P
- D-α-Aminosuberate, effect of, on synaptic activity in isolated hemisected spinal cords of frogs, 591
- Amitriptyline, effect of, on specific binding of [³H]-imipramine in rat brain, 434P
- effect of, on presynaptic receptors in the dog saphenous vein, 422P

- Amphetamine, effect of, on food consumption using a dietary self-selection procedure in rats, 436P
- —, effect of, on core temperature in the rat, 605
- (+)-Amphetamine, waking EEG induced by, in the rat, effects of neuroleptics with central dopamine and nor-adrenaline receptor blocking properties in, 87
- —, interactions of, and chlorpromazine on neurones in the lower brain stem of the rat, 165
- Anaesthesia, with althesin, in experimental animals susceptible to halothane-initiated malignant hyperthermia, 425P
- induced by ketamine, in the rat, effects of physostigmine and neostigmine on, 426P
- -, with urethane, induction of relaxation of smooth muscle during, 255
- , general, effects of high pressure helium and nitrogen on acetylcholine release from guinea-pig during, 221
- Anaesthetics, general, effects of, on the release of acetylcholine from the guinea-pig ileum, 229
- Analgesia, induced by ketamine, in the rat, effects of physostigmine and neostigmine on, 426P
- , induced by morphine in rats, antagonism of, by muscimol, 103
- Analgesic action, of morphine in mammals, relevance of inhibition of synthesis of cyclic AMP to, 51
- Anaphylaxis, slow-reacting substances of, from man, guinea-pig and rat, comparative studies of immuno-logically and non-immunologically produced, 179
- , selected chemical mediators of, reactivity of isolated coronary artery and cardiac veins of calf to, 193
- , slow reacting substance of, effect of, on metabolism of [14C]-arachidonic acid in guinea-pig lungs, 519
- , slow reacting substance of, release of, from rat peritoneum and human lung tissue, effect of salbutamol and disodium cromoglycate on, 23
- Androsterone, effect of, on ouabain receptor binding in dog heart, 345
- Angiotensin, contraction of vascular smooth muscle induced by, effect of urethane on, in rat aortic strips and portal vein segments, 255
- Angiotensin II, effect of, on neurones in rat substantia nigra and nucleus accumbens, 429P
- Anococcygeus muscle, rat, an effect of neostigmine on the response of, to field stimulation, 463P
- —, rat, further sub-classification of α -adrenoceptors in, 421P
- Anti-allergic agent, new, (compound PRD-92-EA), effect of, on anaphylactic reaction of calf isolated coronary artery, 193
- Anti-anaphylactic activities, a comparison of, of salbutamol and disodium cromoglycate in the rat, the rat mast cell and in human lung tissue, 23
- Anti-arrythmic action, of mexiletine, in canine heart, 143
- Anti-arrhythmic effects, of bunaphtine on guinea-pig myocardium, 410P
- **Anticataleptic effect,** of *p*-chlorophenylalanine, reversed by 5-hydroxytryptophan in the mouse and rat, 309
- Anticholinesterase, antidromic firing induced by, in rat isolated nerve-diaphragm preparation, effect of dithiothreitol on, 481P
- Anticholinesterases, effects of, on excitatory actions of acetylcholine on heart, 3

- contracture produced in bovine tracheal smooth muscle by, 464P
- Anticonvulsant effects, of sodium valproate and ethanolamine-O-sulphate in vivo in the mouse, 441P
- Anticonvulsant properties, of ethyl-N-phthalimidoxy acetate in the chick, 441P
- Antidepressant drugs, effects of chronic administration of, on the synthesis of monoamines in rat brain, 435P
- —, tri- and tetracyclic, presynaptic α-adrenoceptorblocking properties among, in mouse vas deferens, 511
- tricyclic and atypical, effects of, on specific binding of [³H]-imipramine in rat brain, 434P
- Antidromic firing, in rat isolated nerve-diaphragm preparation, effect of dithiothreitol on, induced by anticholinesterase, 481P
- Anti-epileptic effects, of dopamine and its agonists, in the rat, 353
- Antigen, sensitizing, (horse plasma), reactivity of isolated coronary artery and cardiac vein of calf to, 193
- Antigen challenge, effect of, on metabolism of [14C]-arachidonic acid in guinea-pig lungs, 519
- , of guinea-pig lungs, effect of, on release of a slowreacting substance, 67
- Antihypertensive effect, of clonidine, reversal by naloxone, 161
- Anti-inflammatory agents, abilities of, to inhibit release reaction and prostaglandin synthesis in human blood platelets, 73
- Anti-inflammatory properties, and ulcerogenic properties, of indomethacin, influence of fasting and cimetidine on relationship between, in rat, 33
- **Antinociceptive effect,** of morphine in the rat, muscimol antagonizes, 103
- Anti-oedemic properties, of indomethacin, influence of fasting and cimetidine on, in rat, 33
- Antirheumatic agents, effects of, on tuberculin pleurisy in the guinea-pig, 447P
- Aorta, rabbit isolated, effects of histamine H₂-receptor blocking drugs on noradrenergic transmission in, 535
- Aortic strips, rat, vascular smooth muscle of, effect of urethane on, 255
- Apomorphine, a demonstration of the ability of, to act on dopamine receptors on nerve terminals in the rat nucleus accumbens to reduce locomotor hyperactivity, 475P
- , hypothermia produced by, or lergotrile, antagonism of, by dopamine antagonists in mice, 434P
- —, effect of, on cobalt-induced epilepsy in the rat, 353
- effect of, on corticosterone secretion in intact rat, 489P
- Aprindine, electrophysiological actions of, on canine heart, compared with those of mexiletine (Kö1173), 143
- Aprotinin, action of, on the inflammatory response in adjuvant rats, 446P
- Arachidonic acid, effects of glucocorticosteroids on the distribution and mobilization of, in fat cell ghosts from rabbit adipose tissue, 393
- —, metabolism of, in rat uterus, homogenates of rat placenta contain a factor(s) which inhibits, 482P
- [14C]-arachidonic acid, incorporation and metabolism of, in guinea-pig lungs, 519
- **Argon**, effect of, on release of acetylcholine from guinea-pig ileum, 229

- Aromatic amino acid decarboxylase, monoamine-depleting properties of a new and very potent enzyme-activated irreversible inhibitor of, α-monofluoromethyldopa, 460P
- inhibition of peripheral sympathetic function by α-monofluoromethyldopa, an irreversible inhibitor of, 461P
- Arrhythmia, induced, in the isolated perfused hypoxic rabbit heart, sensitizing effect of sodium palmitate on, 411P
- Arthritis, induced in rats by Freund's complete adjuvant, actions of cimetidine, mepyramine, indomethacin and aprotinin on inflammatory response in, 446P
- **Arylsulphatase**, effect of, on a slow-reacting substance released from guinea-pig lungs, 67
- Ascorbic acid, hepatic effects of clofibrate, diosgenin and vitamin C on, in male guinea-pigs, 456P
- Aspartate, compared with glutamate, as a neurotransmitter of corticofugal neurones in the rat, 545
- —, responses of neurones of rat cerebral cortex to, effects of diazepam and chlordiazepoxide on, 563
- L- and D-effect of, on synaptic activity in isolated hemisected spinal cords of frogs, 591
- Aspirin, effect of, on contractile action of bradykinin on longitudinal muscle of rat isolated ileum, 527
- —, effect of, on cataleptic effects of Δ'-tetrahydrocannabinol and chlorpromazine in mice, 379
- —, effect of a combination of, and sodium salicyclate on the rat stomach, 484P
- Assessment, true/false units of, in physiology and pharmacology, 503P
- Atenolol, effect of, on hepatic mixed-function oxygenases in the rat, 451P
- Atria, rat, baclofen as a selective agonist for a novel type of γ -aminobutyric acid receptor in, 444P
- —, guinea-pig isolated, effects of histamine H₂-receptor blocking drugs on noradrenergic transmission in, 535
- isolated rat, oxymetazoline-sensitive and -insensitive presynaptic α-adrenoceptors in, 419P
- Atropine, effect of, on contractures in bovine tracheal smooth muscle by eserine and neostigmine, 464P
- effect of, on neurogenic vasodilatation induced in canine paw pad by electrical stimulation, 337
- effect of, on anaphylactic reaction in calf isolated coronary artery, 193
- effect of, on propranolol-induced bronchospasm in the guinea-pig and rat, 488P
- guinea-pig and rat, 488P

 —, effect of, on corticosterone secretion in intact rat, 489P
- effect of, on contractile action of histamine on ileal region of isolated blood-perfused small intestine of the rat, 587
- —, anomalous pK_B value for, in the isolated stomach of the mouse, analysis of, 59
- effect of, on catalepsy induced by tetrabenazine, butyrophenone, physostigmine and pilocarpine in rat and mouse, 309
- —, effect of, on atrial fibrillation in dog heart-lung preparation, 3
- -, effect of, on excitatory actions of acetylcholine on heart, 3
- Atropine sulphate, protective effect of, against streptolysin O in mice, 173
- Audio-visual teaching material, used on courses for new Home Office Licensees, 504P

- Auricles, isolated, excitatory actions of acetylcholine on, 3 Autonomic drugs, effects of, in mice, 504P
- Autonomic outflow, stimulation of, at different levels of the spinal cord and the resulting cardiovascular, gut and bladder responses in the frog, 504P
- α-Autoreceptors, mediation by, of presynaptic control of 5-hydroxytryptamine release in central nerve endings, 424
- Axons, unmyelinated, from rat sciatic nerve, effect of halothane on microtubulex numbers in, 473P
- 2-Azido analogues, enantiomers of, of adenosine and adenine nucleotides, relaxation of isolated taenia coli of guinea-pig by, 153

B

- **Baclofen**, a selective agonist for a novel type of γ -aminobutyric acid receptor in rat atria and mouse vas deferens, 444P
- BAY e 9736, (nimodipine), a new calcium antagonist, cellular mechanism of action of, 409P
- **Behavioural effects,** of benzodiazepines, in the rat, relevance of selective reduction of excitatory amino acid responses in the cerebral cortex to, 563
- **Behavioural scoring,** how good is the agreement between scores?, 477P
- **Benedict Roth Spirometer,** transducer-adapted, for small animals, 506P
- **Benzodiazepines**, selective antagonism by, of neuronal responses to excitatory amino acids in the rat cerebral cortex, 563
- modulation of picrotoxin-induced forepaw myoclonus in the rat by, 440P
- Betamethasone, modulation by, of spontaneous and acetylcholine-induced contractions of rat ileum, 448P
- influence of, on concentrations of digoxin in rat serum, liver and heart, 491P
- **Bethanecol**, gastric acid secretion stimulated by, effect of atropine on, in isolated mouse stomach, 59
- (+)-Bicuculline, effect of, on binding of γ-aminobutyric acid to calf superior cervical ganglia, 445P
- Biphenyl-2-hydroxylase, effects of β -adrenoceptor antagonist on, in rat liver microsomes, 451P
- Biventer cervicis muscle, chick, effects of venom of the green mamba, *Dendroaspis angusticeps*, on 199
- **Bladder,** frog, responses of, to autonomic outflow stimulation at different levels of the spinal cord, 504P
- **Blood flow,** femoral, effect of electrical stimulation of cut tibial nerve on, in anaesthetized dog, 337
- , adrenal, in anaesthetized dog, response of, to adrenocorticotrophic hormone, effect of indomethacin on, 217
- -, effect of ICI 118,587 on, in the dog, 412P
- coronary sinus, effects of clonidine, prazosin and phentolamine on, during cardioaccelerator nerve stimulation in spinal dogs, 283
- **Blood platelets,** human, comparison of the abilities of acetylsalicyclic acid, flurbiprofen and indomethacin to inhibit the release reaction and prostaglandin synthesis in, 73
- **Blood pressure**, effects of α -adrenoceptor agonists on, in the rat, 421P
- -, arterial, effect of ICI 118,587 on, in the dog, 412P

- effect of histamine on, effects of ranitidine and cimetidine on, in the anaesthetized dog, 414P
- --, effect of clonidine on, in spontaneously hypertensive rats, reversal by naloxone, 161
- aortic, effects of clonidine, prazosin and phentolamine on, during cardioaccelerator nerve stimulation in spinal dogs, 283
- **Bradykinin**, effect of, on calf isolated coronary artery and cardiac vein, 193
- effect of, on capillary filtration in cat small intestine, 361
- effect of, on release of arachidonic acid from fat cell ghosts from rabbit adipose tissue, 393
- contractile action of, on the longitudinal muscle of rat isolated ileum, effects of prostaglandins on, 527
- effect of, on metabolism of [14C]-arachidonic acid in guinea-pig lungs, 519
- attenuation by, of adrenergically induced vasoconstriction in the isolated perfused kidney of the rabbit, relationship to prostaglandin synthesis, 269
- **Brain**, rat and mouse, concentration of 5-hydroxytryptamine in, influence of, on catalepsy induced by brainamine depleting neuroleptics or by cholinomimetics, 309
- rat and mouse, monoamines in, production of catalepsy and depletion of, by a butyrophenone derivative, 115
- rat, regions of, concomitant development of [³H]-dopamine and [³H]-5-hydroxytryptamine uptake systems in, 387
- —, rat, effects of ions on the binding of agonists and antagonists to muscarinic receptors in, 371
- rat, effects of chronic administration of antidepressants on the synthesis of monoamines in, 435P
- —, rat, specific binding of [³H]-imipramine in, 434P
- mouse, dopamine receptors in, stereoselective blockade of, by sulpiride and sultopride, 433P
- —, of socially reared and isolated young rats, effects of fluphenazine decanoate on concentrations of catecholamines and γ-aminobutyric acid in, 439P
- , lithiun concentration in, comparison of, in guinea-pig and rat, 474P
- energy metabolism in, effects of phosphatidylserine on, in the rat, 611
- Brain homogenates, rat, synaptosomal fractions of, binding of [3H]-noradrenaline and [14C]-propranolol to, 497P
- **Brain stem,** lower, in the rat, interactions of (+)-amphetamine and chlorpromazine in, 165
- of developing rat, synaptosomal uptake mechanisms for [3H]-dopamine and [3H]-5-hydroxytryptamine in, 387
- **British Pharmacological Society,** Demonstrations given at Aston, 4–6 April, 1979, 497P
- Proceedings of, 17-20 July, 1979, Trinity College, University of Dublin, 409P-507P
- **Bronchospasm,** propranolol-induced, in guinea-pig and rat, effects of sodium cromoglycate on, 488P
- **Bronchoconstriction,** induced by inhalation of an aerosol of histamine in the anaesthetized dog, effect of lignocaine on effect of sodium cromoglycate on, 569
- **Bromocryptine,** effect of, on cobalt-induced epilepsy in the rat, 353

- Bulbocapnine, effect of, on isolated strips of rabbit splenic artery, 474P
- Bunaphtine, electrophysiological effects of, on guinea-pig myocardium, 410P
- plus mepyramine, effects of, on neurogenic vasodilatation induced in canine paw pad by electrical stimulation, 337
- Burimamide, effect of, on noradrenergic transmission in the isolated aorta of the rabbit and atria of the guinea-pig, 535
- **Butyrophenone,** U-32,802A, influence of cerebral 5-hydroxytryptamine on catalepsy induced by, in rat and mouse, 309
- Butyrophenone derivative, production of catalepsy and depletion of brain monoamines by, in rat and mouse, 115

C

- Cadmium ion, effect of, on binding of agonists and antagonists to muscarinic receptors in rat brain, 371
- Caesium ion, effect of, on binding of agonists and antagonists to muscarinic receptors in rat brain, 371
- Caffeine, effect of, on responses of sheep coronary arteries to catecholamines and sympathetic nerve stimulation, 553
- Calcitonin, salmon, action of, on indomethacin-induced gastric ulceration in the rat, 483P
- Calcium, respiration stimulated by, in mitochondria isolated from guinea-pig liver, comparison of effects of 2-2'-pyridylisatogen, 2-phenylisatogen and papaverine on, 480P
- effect of cortisol on response of depolarized calciumfree mouse uterus to, 490P
- extracellular, investigation of the role of, in the control of acid secretion in the isolated whole stomach of the rat 123
- effect of, on inhibitory effect of 5-hydroxytryptamine on contractile response of dog isolated saphenous vein to electrical stimulation, 247
- Calcium antagonist, new, nimodipine (BAY e 9736), cellular mechanism of action of, 409P
- **Calcium ion,** contraction of potassium depolarized rat aortic strips and portal vein segments by, effect of urethane on, 255
- —, effect of, on inhibitory junctional transmission in smooth muscle of guinea-pig small intestine, 39
- effect of, on effect of high pressure nitrogen and helium on acetylcholine release from guinea-pig ileum, 221
- —, effect of, on binding of agonists and antagonists to muscarinic receptors in rat brain, 371
- withdrawal of, effects of, and verapamil on excitationcontraction coupling in rabbit pulmonary vascular
 smooth muscle, 467P
- Calcium ionophore, A23187, effect of, on release of a slowreacting substance from guinea-pig lungs, 67
- Cannabidiol, lack of cataleptic effect of, in mice, 379
- development of tolerance to the prolongation of hexobarbitone sleeping time caused by, in the mouse, 93
- Capillary filtration, in cat small intestine, effects of isoprenaline and bradykin on, 361

- Carbon tetrafluoride, effect of, on acetylcholine release from guinea-pig ileum, 229
- Carbachol, effect of, on calf isolated coronary artery and cardiac vein, 193
- Carcinogens, chemical, initiation of malignancy by, through alkylation of DNA, 451P
- Cardiac fibres, canine, electrophysiological actions of mexiletine (Kö1173) on, 143
- Cardiac glycosides, effect of, on ouabain receptor binding in dog heart, 345
- Cardiac output, effect of 7-propyl-theophylline dopamine on, in the cat, 239
- Cardiac receptors, left ventricular, effect of sodium cromoglycate on, in the anaesthetized dog, 569
- Cardiac vein, calf isolated, in vitro, reactivity of, to selected mediators of anaphylaxis and to sensitizing antigen (horse plasma), 193
- Cardioaccelerator nerve stimulation, in spinal dogs, effects of clonidine, prazosin and phentolamine on heart rate and coronary sinus catecholamine concentration during, 283
- Cardiovascular activity, of ICI 118,587, a novel β -adrenoceptor partial antagonist, in the dog, 412P
- Cardiovascular effects, of 7-propyltheophylline-dopamine, compared with dopamine and dobutamine in the cat,
- Cardiovascular responses, to autonomic outflow stimulation at different levels of the frog spinal cord, 504P
- Cardiovascular system, of the rat, sub-division of β -adrenoceptors in, 367
- rat, further sub-classification of α-adrenoceptors in, 421P
- Catalepsy, production of, and depletion of brain monoamines by a butyrophenone derivative in rat and mouse, 115
- —, induced by brain amine depleting neuroleptics or by cholinomimetics, influence of cerebral 5-hydroxytryptamine on, in rat and mouse, 309
- , haloperidol-induced, biphasic effect of direct GABA mimetic drugs on, in rat, 442P
- Cataleptic responses, to Δ' -tetrahydrocannabinol in mice, 379
- Caudate nucleus, rat, effect of thyrotrophin releasing hormone on [3H]-dopamine release from slices of, in vitro, 323
- Catecholamine agonists, effects of, on waking EEG in the rat. 87
- Catecholamines, concentration of, in coronary sinus during cardioaccelerator nerve stimulation in spinal dogs, effects of clonidine, prazosin and phentolamine on, 283
- effects of uptake inhibitors on responses of sheep coronary arteries to, 553
- effects of fluphenazine decanoate on brain concentration of, in socially reared and isolated young rats, 439P
- —, effects of α-monofluoromethyldopa on, in mouse brain, heart and kidney, 460P
- —, effects of, on rat isolated uterus, 466P
- Catechol-O-methyl transferase, contribution of, to noradrenaline clearance in the rabbit, 452P
- Central nerve endings, evidence for an autoreceptormediated presynaptic control of 5-hydroxytryptamine release in, 424P

- Cerebellum, rat, Purkinje cells in, responses of, to excitatory amino acids, selective antagonism by benzodiazepines, 563
- Cerebral cortex, rat, effects of cocaine and desipramine on clonidine-induced inhibition of [3H]-noradrenaline release from, 417P
- rat, selective antagonism by benzodiazepines of neuronal responses to excitatory amino acids in, 563
- , of developing rat, synaptosomal uptake mechanisms for [3H]-5-hydroxytryptamine and [3H]-dopamine in, 387
- Cervical ganglia, superior, calf, sodium-independent γ-aminobutyric acid receptor binding in, 445P
- CF 25-397, effect of, on cobalt-induced epilepsy in the rat, 353
- Chemokinesis, of rat polymorphonuclear leucocytes, effect of dibutyryl cyclic AMP on, 472P
- Chemotaxis, of rat polymorphonuclear leucocytes, effect of dibutyryl cyclic AMP on, 472P
- Chlordiazepoxide, effect of, on picrotoxin-induced forepaw myoclonus in the rat, 440P
- effect of, on responses of cortical neurones in rat cerebral cortex to excitatory amino acids and acetylcholine, 563
- Chloride ion, effect of, on binding of agonists and antagonists to muscarinic receptors in rat brain. 371
- Chlorimipramine, effect of chronic administration of, on synthesis of monoamines in rat brain, 435P
- phospholipidosis induced by, in rats, biochemical and pharmacokinetic observations, 449P
- **Chlormadinone acetate,** effect of, on ouabain receptor binding in dog heart, 345
- p-Chlorophenylalanine, effect of, on catalepsy induced by tetrabenazine, butyrophenone, physostigmine and pilocarpine in the rat and mouse, 309
- **Chloroquine**, effect of, on tuberculin pleurisy in the guineapig, 447P
- Chlorpromazine, interactions of, and (+)-amphetamine on neurones of the lower brain stem of the rat, 165
- --, protective effect of, against streptolysin O in mice, 173
- -, cataleptic action of, in mice, 379
- effect of, on insulin secretion from perfused pancreas of the rat, 265
- —, effect of, on 5-hydroxytryptamine receptors in the hindquarters of the rat, 79
- Cholesterol, effect of, on ouabain receptor binding in dog heart, 345
- , hepatic, effects of clofibrate, diosgenin and vitamin C on, in male guinea-pigs, 456P
- Choline, some cyclic analogues of, neuromuscular blocking mission in rat phrenic nerve-hemidiaphragm preparation, 486P
- Choline analogues, and their acetylated derivatives, pharmacological activity of, on cholinergic transmission in rat phrenic nerve-hemidiaphragm preparation, 486P
- Cholinergic interneurones, involvement of, in contractile action of histamine on ileal region of rat isolated blood-perfused small intestine, 587
- Cholinergic transmission, in rat phrenic nerve-hemidiaphragm preparation, pharmacological activity of piperidine derivatives containing a choline-like moiety on, 486P

- does a prostaglandin modulate, in the guinea-pig ileum?, 464P
- **Cholinomimetics**, influence of cerebral 5-hydroxytryptamine on catalepsy induced by, in rat and mouse, 309
- Cimetidine, influence of, and fasting on the relationship between ulcerogenic and anti-inflammatory properties of indomethacin in rat, 33
- , antagonism of vasodepressor and gastric secretory responses to histamine by, in the anaesthetized dog, 414P
- effect of, on propranolol-induced bronchospasm in the guinea-pig and rat, 488P
- effect of, on noradrenergic transmission in the isolated aorta of the rabbit and atria of the guinea-pig, 535
- aorta of the rabbit and atria of the guinea-pig, 535
 action of, on the inflammatory response in adjuvant rats, 446P
- , effect of, on relaxation of rabbit trachea by histamine, 465P
- Cinanserin, effect of, on corticosterone in intact rat, 489P
- Circling behaviour, mediated by dopamine, is modulated by lesions of the ventro-medial nucleus of the rat thalamus, 432P
- Clofibrate, hypocholesterolemic effects of, in male guineapigs, 456P
- Clonazepam, effect of, on picrotoxin-induced forepaw myoclonus in the rat, 440P
- Clonidine, effect of, on arterial blood pressure, heart rate and tension of anococcygeus muscle of the rat, 421P
- prejunctional interaction of, with adenosine in rat vas deferens, 492P
- —, effect of, on corticosterone secretion in intact rat, 489P
- ---, effect of, on evoked overflow and contractile response to electrical stimulation in mouse deferens incubated with tritiated noradrenaline, 511
- effect of, on noradrenergic transmission in the isolated aorta of the rabbit and atria of the guinea-pig, effects of histamine H₂-receptor blocking drugs on, 535
- inhibition of [³H]-noradrenaline release from rat cerebral cortex by, effects of cocaine and desipramine on, 417P
- —, antihypertensive effect of, reversal by naloxone, 161
- —, sedation induced by, in the rat, mediated by α_2 -adrenoceptors, 133
- effect of, on heart rate and coronary sinus catecholamine concentration during cardioaccelerator nerve stimulation in spinal dogs, 283
- Clorgyline, effect of pretreatment with, on the fate of intraduodenally instilled [14C]-tyramine in the cat, 454P
- Cobalt, epilepsy induced by, in the rat, effects of dopamine agonists on, 353
- Cocaine, effect of, on hypothermic effect of amphetamine on hypothermic response to dopamine in the rat, 605
- effect of, on effects of mianserin and Org GC 94 on evoked overflow and contractile response to electrical stimulation in mouse vas deferens incubated with tritiated noradrenaline, 511
- effect of, on responses of sheep coronary arteries to catecholamines and sympathetic nerve stimulation, 553
- , antagonizes the clonidine-induced inhibition of [3H]-noradrenaline release from the rat cerebral cortex, 417P
- Cockroach, American, demonstration of central synaptic effects of chemicals in, 495P

- Codeine, effect of, on ouabain receptor binding in dog heart, 345
- Collagen, mouse embryos cultured over, effects of oestradiol-17 β and tamoxifen on the development of, 458P
- Compound PRD-92-EA, a new anti-allergic agent, effect of, on anaphylactic reaction of calf isolated coronary artery, 193
- Cooling, effect of, on excitatory actions of acetylcholine on isolated auricles, 3
- Copper ion, effect of, on binding of agonists and antagonists to muscarinic receptors in rat brain, 371
- Core temperature, effects of amphetamine and dopamine on, in the rat, 605
- Coronary anaphylaxis, in vitro, in isolated coronary arteries and cardiac veins of the calf, 193
- Coronary arteries, sheep, effects of uptake inhibitors on responses of, to catecholamines and sympathetic nerve stimulation, 553
- Coronary artery, calf isolated, *in vitro*, reactivity of, to selected mediators of anaphylaxis and to sensitizing antigen (horse plasma), 193
- Coronary sinus, catecholamine concentration in, during cardioaccelerator nerve stimulation in spinal dogs, effects of clonidine, prazosin and phentolamine on, 283
- Corpus striatum, of developing rat, synaptosomal uptake mechanisms for [3H]-5-hydroxytryptamine and [3H]-dopamine in, 387
- Cortical neurones, selective antagonism by benzodiazepines of neuronal responses of, to excitatory amino acids in the rat cerebral cortex, 563
- Corticofugal neurones, amino acids as neurotransmitters of, in the rat, a comparison of glutamate and aspartate, 545
- Corticosterone, effect of, on ouabain receptor binding in dog heart, 345
- -, secretion of, pharmacological control of, in the intact rat, 489P
- Cortisol, effect of, on responses of sheep coronary arteries to catecholamines and sympathetic nerve stimulation, 553
- concentration of, in adrenal blood, effect of adrenocorticotrophic hormone on, in anaesthetized dog, 217
- effect of, on response of depolarized, calcium-free mouse uterus to calcium, 490P
- Corynebacterium parvum, pharmacokinetics of phenytoin and liver cytochrome P-450 levels in mice after single doses of, 471P
- Cromoglycate, sodium, effects of, on lung irritant receptors and left ventricular cardiac receptors in the anaesthetized dog, 569
- Cromoglycate, sodium, effect of, on propranolol-induced bronchospasm in guinea-pig and rat, 488P
- Cross-tolerance, induced by morphine and ethylketocyclazocine in mouse and guinea-pig, 427P
- Cyclo-oxygenase products, transformation of [14C]-arachidonic acid to, in guinea-pig lungs, 519
- Cyproheptadine, effect of, on release of 5-hydroxytryptamine from rat hypothalamic synaptosomes, 424P
- -, effect of, on corticosterone secretion in intact rat, 489P
- —, effect of, on 5-hydroxytryptamine receptors in the hindquarters of the rat, 79
- effect of, on insulin secretion from perfused pancreas of the rat, 265

- effect of, on inhibitory effect of 5-hydroxytryptamine on contractile response of dog isolated saphenous vein to electrical stimulation, 247
- L-Cysteate, effect of, on synaptic activity in isolated hemisected spinal cords of frogs, 591
- L-Cysteine sulphinate, effect of, on synaptic activity in isolated hemisected spinal cords of frogs, 591
- Cytochrome P-448, formation of, in liver microsomes, as a result of modification of haemoproteins by chemical carcinogens, 451P
- Cytochrome P-450, hepatic microsomal, effect of cannabidiol on, in the mouse, 93
- liver, pharmacokinetics of phenytoin and levels of, in mice after single doses of Corynehacterium parvum, 471P
- Cyproterone-17α-acetate, effect of, on ouabain receptor binding in dog heart, 345
- Cyproterone-17α-OH, effect of, on ouabain receptor binding in dog heart, 345

D

- **D4975,** (7-propyl-theophylline-dopamine), cardiovascular effects of, compared with dopamine and dobutamine in the cat, 239
- Dendroaspis angusticeps, green mamba, venom of, effects of, on skeletal muscle and neuromuscular transmission in rat, chick and mouse, 199
- **Deoxycorticosterone**, effect of, on ouabain receptor binding in dog heart, 345
- **Dependence**, induced by morphine and ethylketocyclazocine in mouse and guinea-pig, 427P
- physical, assessment of, in rats after continuous intraperitoneal infusion of morphine or ketocyclazocine, 427P
- Deprenyl, effect of pretreatment with, on the fate of intraduodenally instilled [14C]-tyramine in the cat, 454P
- **Desipramine**, effect of, on specific binding of [³H]-imipramine in rat brain, 434P
- effect of chronic administration of, on synthesis of monoamines in rat brain, 435P
- effect of, on heart rate and coronary sinus catecholamine concentration during cardioaccelerator nerve stimulation in spinal dogs, 283
- antagonizes the clonidine-induced inhibition of [³H]-noradrenaline release from rat cerebral cortex, 417P
- effect of, on responses of sheep coronary arteries to catecholamines and sympathetic nerve stimulation, 553
- effect of, on evoked overflow and contractile response to electrical stimulation in mouse vas deferens incubated with tritiated noradrenaline, 511
- -, effect of, on noradrenaline clearance in the rabbit, 452P
- **Dexamethasone**, response of adrenal blood flow to adrenocorticotrophic hormone of mongrel dogs treated with, effect of indomethacin on, 217
- effect of, on incorporation of arachidonic acid into phospholipids, neutral lipids and triglycerides in fat cell ghosts from rabbit adipose tissue, 393

- **Dextrorphan**, effect of, on ouabain receptor binding in dog heart, 345
- **Diamino dicarboxylic acids.** effects of, on synaptic activity in isolated hemisected spinal cords of frogs, 591
- **Diazepam**, effect of, on responses of cortical neurones in rat cerebral cortex to excitatory amino acids and acetylcholine, 563
- —, effect of, on picrotoxin-induced forepaw myoclonus in the rat, 440P
- Dicarboxylic acids, monoamino and diamino, effects of, on synaptic activity in isolated hemisected spinal cords of frogs, 591
- Dietary self-selection procedure, investigation of food consumption using, effects of pharmacological manipulation and feeding schedules on, in rats 436P
- **Diethazine,** protective effect of, against streptolysin O in mice, 173
- **Diflunisal**, effect of, on cataleptic effects of Δ' -tetrahydro-cannabinol in mice, 379
- **Digitoxigenin,** effect of, on ouabain receptor binding in dog heart, 345
- Digitoxin, effect of, on ouabain receptor binding in dog heart, 345
- Digoxin, influence of betamethasone on the concentrations of, in rat serum, liver and heart, 491P
- -, effect of, on ouabain receptor binding in dog heart,
- (-)-Dihydroalprenolol, analysis of the activity and distribution of, in the rat using an ex vivo receptor binding assay, 415P
- —, binding of, to cardiac β -adrenoceptors in pig heart, effects of temperature and ionic environment on,
- [3H]-dihydroalprenolol, binding of, to rat erythrocyte membranes, to demonstrate homogeneity of β -adrenoceptors, 479P
- [3H]-dihydroergocryptine, binding of, to brain membranes in spontaneously hypertensive rats, effect of naloxone on effect of clonidine on, 161
- 2,3-Dihydroxy-9-amino-9,10-dihydrophenanthrene, an analogue of ADTN, effect of, on rat nucleus accumbens, 430P
- Dihydroxyphenylacetic acid, effects of α-monofluoromethyldopa on, in mouse brain, heart and kidney, 460P
- 3,4-Dihydroxyphenylacetic acid, effects of chronic administration of antidepressants on synthesis of, in rat brain, 435P
- **5,7-Dihydroxytryptamine,** unilateral lesions of the rat dorsal raphe nucleus induced by, differential rotational behaviour after, 431P
- Diltiazem, effect of, on the mechanical performance of the rabbit myocardium perfused with an oxygenated and a hypoxic medium, 485P
- **Diosgenin**, hypocholesterolemic effects of, in male guineapigs, 456P
- **Diphenylhydantoin,** effect of, on ouabain receptor binding in dog heart, 345
- **Diphenylhydantoin,** electrophysiological actions of, on canine heart, compared with those of mexiletine (Kö1173), 143
- **Disodium cromoglycate,** a comparison of the antianaphylactic activities of salbutamol and, in the rat, the rat mast cell, and in human lung tissue, 23

Dithiothreitol, effect of, on anticholinesterase induced antidromic firing and twitch potentiation in rat isolated nerve-diaphragm preparation, 481P

Diuretic testing, 503P

Dobutamine, cardiovascular pharmacology of, compared with 7-propyl-theophyllinedopamine and dopamine in the cat, 239

D.L-DOPA, effect of, on catalepsy induced by tetrabenazine and butyrophenone in the rat and mouse, 309

L-DOPA, waking EEG induced by, in the rat, effects of neuroleptics with central dopamine and noradrenaline receptor blocking properties in, 87

Dopamine, concentration of, in coronary sinus of spinal dogs, effects of clonidine, prazosin and phentolamine on, during cardioaccelerator nerve stimulation, 283

- —, in rat and mouse brain, effects of a butyrophenone derivative and tetrabenazine on, 115
- cardiovascular pharmacology of, compared with 7-propyl-theophyllinedopamine and dobutamine in the cat, 239
- -, role of, in corticosterone secretion in intact rat, 489P
- -, effect of, on ouabain receptor binding in dog heart, 345
- —, effects of chronic administration of antidepressants on synthesis of, in rat brain, 435P
- neuronally released, modulation of sympathetic transmission by, in the rabbit ear artery, 185
- circling behaviour mediated by, is modulated by lesions of the ventromedial nucleus of the rat thalamus, 432P
- effect of, on neurones in rat substantia nigra and nucleus accumbens, 429P
- -, effect of, on rat nucleus accumbens, 430P
- effect of fluphenazine decanoate on brain concentration of, in socially reared and isolated young rats, 439P
- —, effects of α -monofluoromethyldopa on, in mouse brain, heart and kidney, 460P
- —, effect of, on cobalt-induced epilepsy in the rat, 353
- —, endogenous evidence for a hypothermia mediated by, in the rat, 605

[3H]-dopamine, release of, from slices of rat nucleus accumbens *in vitro*, stimulated by thyrotrophin releasing hormone, 323

—, concomitant development of uptake systems for, and [³H]-5-hydroxytryptamine in rat brain regions, 387

Dopamine analogues, pre- and post-synaptic activities of, and related compounds, in rabbit isolated perfused ear artery and renal vasculature of the anaesthetized dog, 421P

Dopamine agonists, and cobalt-induced epilepsy in the rat, 353

Dopamine antagonists, antagonism by, of hypothermia produced by apomorphine or lergotrile in mice, 434P

Dopamine receptor agonists, effects of, in the rat nucleus accumbens, 430P

Dopamine receptor antagonists, effects of, in the rat nucleus accumbens, 430P

Dopamine receptor blocking properties, central, effects of neuroleptics with, in L-DOPA and (+)-amphetamine-induced waking EEG in the rat, 87

Dopamine receptors, prejunctional, role of, in modulation of sympathetic transmission by neuronally released dopamine in the rabbit ear artery, 185

- demonstration of ability of apomorphine to act on, on nerve terminals in the rat nucleus accumbens to reduce locomotor hyperactivity, 475P
- in mouse brain, stereoselective blockade of, by sulpiride and sultopride, 433P

Dopaminergic system, evidence for the presence of, within the preoptic region of the rat, which mediates a lowering of core temperature, 605

Dopaminergic vasodilator innervation, of canine paw pad, evidence for, 337

Dose-response curves, comparison of cumulative and individual, 491P

Doxepin, effect of, on insulin secretion from perfused pancreas of the rat, 265

 effect of, on evoked overflow and contractile response to electrical stimulation in mouse vas deferens incubated with tritiated noradrenaline, 511

Duodenum, rabbit, longitudinal muscle from, effects of purines and intramural inhibitory nerve stimulation on, effect of theophylline on, 301

E

Ear artery, rabbit, modulation of sympathetic transmission by neuronally released dopamine in, 185

- rabbit, effects of histamine on responses of, to electrical stimulation and to exogenous noradrenaline, 329
- rabbit isolated perfused, pre- and post-synaptic activities of some dopamine analogues and related compounds, 421P

Education Session, at University of Dublin meeting, 17–20 July, 1979, 501P

EGTA, effect of, on acid secretion in the isolated whole stomach of the rat, in the presence of calcium, 123

Eicosatetraynoic acid, effect of, on effects of prostaglandins E₂ and I₂ on human lymphocyte transformation, 17

Electrical responses, of isolated auricles, effects of acetylcholine on, 3

Electrical field stimulation, an effect of neostigmine on the response of the rat anococcygeus muscle to, 463P

Electrical stimulation, relaxation of guinea-pig fundic strip by, lack of antagonism by the ophylline or ATP treatment. 293

- effects of histamine on responses of rabbit ear artery to, 329
- effect of, of cut tibial nerve on femoral blood flow in anaesthetized dog, 337
- of sympathetic nerve, vasoconstriction induced by, in isolated perfused kidney of the rabbit, effect of bradykinin on, in the presence of indomethacin, an inhibitor of prostaglandin synthesis, 269
- , of cardioaccelerator nerve, in spinal dogs, effects of clonidine, prazosin and phentolamine on heart rate and coronary sinus catecholamine concentration during, 283
- , of dog isolated saphenous vein, effect of 5-hydroxytryptamine on, 247
- , of canine cardiac Purkinje fibres and ventricular muscle, effect of mexiletine (Kö1173) on, 143
- repetitive effect of, on inhibitory junctional transmission in smooth muscle of guinea-pig small intestine, 39

- acetylcholine release evoked by, in guinea-pig ileum, effects of high pressure helium and nitrogen on, 221
- —, contractile response of mouse vas deferens to, effects of tri- and teracyclic antidepressant drugs on, 511
- Electroencephalogram, waking, in the rat, effects of neuroleptics with central dopamine and noradrenaline receptor blocking properties in L-DOPA and (+)-amphetamine-induced, 87
- Electrolytes, urinary exretion of, during amiloride administration to congestive heart failure patients, timerelated changes in, 494P
- **Electro-osmosis,** relative contribution of, and iontophoresis to electrophoretic release of noradrenaline from multi-barrelled micropipettes, 478P
- **Electrophoretic release**, of noradrenaline from multibarrelled micropipettes, relative contribution of iontophoresis and electro-osmosis to, 478P
- **Electrophysiological effects,** of bunaphtine on guinea-pig myocardium, 410P
- **Embryos**, mouse, effects of oestradiol- 17β and tamoxifen on the development of, cultured over collagen, 458P
- β-Endorphin, effect of, on field stimulated rat rectum, 428P Energy metabolism, brain, effects of phosphatidylserine on, in the rat, 611
- Enkephalins, effects of, on field stimulated isolated rat rectum, 428P
- Epiandrosterone, effect of, on ouabain receptor binding in dog heart, 345
- **Epilepsy,** induced by cobalt, in the rat, effects of dopamine agonists on, 353
- Epinine, effect of, on isolated strips of rabbit splenic artery, 474P
- Ergometrine, effect of, on neuronally released dopamine in the rabbit ear artery, 185
- effect of, on neurogenic vasodilatation induced in canine paw pad by electrical stimulation, 337
- Erythrocytes, rat, homogeneity of β -adrenoceptors on, 479P
- , lithium concentration in, comparison of, in guinea-pig and rat, 474P
- Eserine, effect of, on excitatory actions of acetylcholine on perfused rabbit heart, 3
- contracture produced in bovine tracheal smooth muscle by, 464P
- Ethanolamine-O-sulphate, effect of, on metabolism of γ-aminobutyric acid in vivo in the mouse, 441P
- **Ethopropazine hydrochloride,** protective effect of, against streptolysin O in mice, 173
- Ethoxyresorufin de-ethylase, effects of β -adrenoceptor antagonists on, in rat liver microsomes, 451P
- Ethyl-N-phthalimidoxy acetate, anticonvulsant properties of, in the chick, 441P
- **Excitation-contraction coupling,** effects of calcium ion withdrawal and verapamil on, in rabbit pulmonary vascular smooth muscle, 467P

F

Fasting, influence of, and cimetidine on the relationship between ulcerogenic and anti-inflammatory properties of indomethacin in rat, 33

- Fat cell ghosts, from rabbit adipose tissue, effects of glucocorticosteroids on distribution and mobilization of arachidonic acid in, 393
- Fatty acids, free, presence of radioactivity in, after infusion of [14C]-arachidonic acid in guinea-pig lungs, 519
- release of, from both neutral lipids and phospholipids when rabbit fat cell ghosts were stimulated by adrenocorticotrophic hormone, 393
- Feeding schedules, effects of, on food consumption using a dietary self-selection procedure in rats, 436P
- Fenethiazine, protective effect of, against streptolysin in mice, 173
- Fenfluramine, effect of, on food consumption using a dietary self-selection procedure in rats, 436P
- Fibrillation, atrial and ventricular, effect of acetylcholine on, 3
- Fla-63, effect of, on dopamine- β -hydroxylase in the rabbit ear artery, 185
- 5-Fluoroucil, thiamin deficiency induced by, an experimental study, 495P
- Fluphenazine, effect of, on effect of dopamine receptor agonists and antagonists on rat nucleus accumbens, 430P
- Fluphenazine decanoate, neurochemical effects of, in socially-reared and isolated young rats, 439P
- Flurazepam, effect of, on picrotoxin-induced forepaw myoclonus in the rat, 440P
- Flurbiprofen, comparison of abilities of, acetylsalicyclic acid and indomethacin to inhibit the release reaction and prostaglandin synthesis in human blood platelets, 73
- Flutamide, effect of, on ouabain receptor binding in dog heart, 345
- Follicle stimulating hormone, effect of, on ouabain receptor binding in dog heart, 345
- Food consumption, investigation of, using a dietary selfselection procedure, effects of pharmacological manipulation and feeding schedules on, in rats, 436P
- Forepaw myoclonus, in the rat, modulation of picrotoxininduced, by benzodiazepines, 440P
- FPL55712, effect of, on a slow-reacting substance released from guinea-pig lungs, 67
- Free fatty acids, presence of radioactivity in, after infusion of [14C]-arachidonic acid in guinea-pig lungs, 519
- serum, relationship between, and arrhythmias after acute myocardial infarction, 411P
- Fundic strip, guinea-pig, relaxation of, by adenosine, adenosine triphosphate and electrical stimulation, lack of antagonism by the ophylline or ATP treatment, 293
- guinea-pig, longitudinal muscle from, effects of purines and intramural inhibitory nerve stimulation on, effect of theophylline on, 301
- rat, use of, to assay release of prostaglandin-like substance from rat isolated ileum after treatment with aspirin and indomethacin, 527

G

- **GABA-ergic system,** involvement of, in morphine analgesia in the rat, 103
- **Gas chromatographic technique**, sensitive, for quantification of urinary tryptamine, 469P

- Gastrin, acid secretion induced by, in the isolated whole stomach of the rat, effect of calcium on, 123
- Gastric acid secretion, stimulated by histamine (and bethanecol), effect of metiamide (and atropine) on, in mouse isolated stomach. 59
- —, in the isolated whole stomach of the rat, investigation of the role of extracellular calcium in, 123
- effect of histamine on, effects of ranitidine and cimetidine on, in the anaesthetized dog, 414P
- a method of illustrating changes in, in rat exteriorized stomach, 505P
- Gastric mucosa, rat, effect of a combination of aspirin and sodium salicyclate on, 484P
- Gastric ulceration, indomethacin-induced, in the rat, action of salmon calcitonin on, 483P
- Gastric ulcers, produced by indomethacin, in rat, effect of fasting and cimetidine on, 33
- Glucagon, effect of, on ouabain receptor binding in dog heart 345
- **Glucocorticosteroids**, effects of, on the distribution and mobilization of arachidonic acid in fat cell ghosts from rabbit adipose tissue, 393
- **β-Glucuronidase**, release of, as a parameter of tuberculin pleurisy in the guinea-pig, effects of antirheumatic agents on, 447P
- Glutamate, compared with aspartate, as a neurotransmitter of corticofugal neurones in the rat, 545
- responses of neurones of rat cerebral cortex to, effects of diazepam and chlordiazepoxide on, 563
- L-Glutamate, effect of, on synaptic activity in isolated hemisected spinal cords of frogs, 591
- Gold salts, effect of, on tuberculin pleurisy in the guineapig, 447P
- Green mamba, Dendroaspis angusticeps, venom of, effects of, on skeletal muscle and neuromuscular transmission in rat, chick and mouse, 199
- Growth hormone, effect of, on ouabain receptor binding in dog heart, 345
- Guanabenz, effect of, on arterial blood pressure, heart rate and tension of anococcygeus muscle of rat, 421P
- Guanethidine, effect of, on effect of theophylline and intramural inhibitory nerve stimulation in intestine of rabbit and guinea-pig, 301
- effect of, on effect of electrical stimulation of cut tibial nerve on femoral blood flow in anaesthetized dog, 337
- Gut, frog, response of, to autonomic outflow stimulation at different levels of the spinal cord, 504P

Н

- Haloperidol, effect of, on L-DOPA and (+)-amphetamineinduced waking EEG in the rat, 87
- , catalepsy in rat induced by, biphasic effect of direct GABA mimetic drugs on, 442P
- , antagonism by, of hypothermia produced by apomorphine or lergotrile in mice, 434P
- Halothane, effect of, on microtubule numbers in unmyelinated axons from rat sciatic nerve, 473P
- malignant hyperthermia initiated by, althesin as an anaesthetic in experimental animals susceptible to, 425P

- Hay Fever, diagnosis and treatment with vitamin C, 494P Heart, excitatory actions of acetylcholine on, 3
- —, pig, cardiac β-adrenoceptors in, effects of temperature and ionic environment on antagonist binding to, 416P
- isolated perfused hypoxic rabbit, sensitizing effect of sodium palmitate to an induced arrhythmia in, 411P
- dog, cardiac receptors in left ventricle of, effects of sodium cromoglycate on, 569
- , rat, influence of betamethasone on concentration of digoxin in, 491P
- canine, antiarrythmic action of mexiletine (Kö1173) on, 143
- Heart failure, congestive, patients suffering from, timerelated changes in urinary aldosterone and electrolyte excretion during amiloride administration to, 494P
- Heart rate, effects of clonidine, prazosin and phentolamine on, during cardioaccelerator nerve stimulation in spinal dogs, 283
- effect of 7-propyl-theophylline-dopamine on, in the cat, 239
- --, effect of ICI 118,587 on, in the dog, 412P
- effect of clonidine on, in spontaneously hypertensive rats, reversal by naloxone, 161
- —, effects of α-adrenoceptors agonists on, in the rat, 421P **Helium,** effect of, on effect of general anaesthetics on acetylcholine release from guinea-pig ileum, 229
- high pressure, effects of, on release of acetylcholine from guinea-pig ileum, 221
- Hemicholinium-3, some cyclic analogues of, neuromuscular blocking action of, in rat phrenic nerve-hemidia-phragm preparation, 498P
- **Hepatic microsomes,** in the mouse, effect of cannabidiol on drug-metabolizing system of, 93
- **Hepatic oxygenases,** mixed-function, effects of β -adrenoceptor antagonists on, in the rat, 451P
- **Hexamethonium**, effect of, on contractile action of histamine on ileal region of the isolated blood-perfused small intestine of the rat, 587
- **Hexobarbitone**, sleeping time due to, development of tolerance to the prolongation of, caused by cannabidiol in the mouse, 93
- **Hindquarters,** rat, some properties of 5-hydroxytryptamine receptors in, 79
- Hippocampus, rat, evidence for the release of 5-hydroxytryptamine from, by α-methyltryptamine, 438P
- Histamine, anaphylactic responses to, in rat, effect of salbutamol and disodium cromoglycate on, in rat skin, peritoneum, mast cell and human lung tissue, 23
- , acid secretion induced by, in the isolated whole stomach of the rat, effect of calcium on, 123
- --, gastric acid secretion stimulated by, effect of metiamide on, in mouse isolated stomach, 59
- --, antagonism of vasodepressor and gastric secretory responses to, by ranitidine and cimetidine in the anaesthetized dog, 414P
- —, contractile action of, upon the ileal region of the isolated blood-perfused small intestine of the rat, 587
- inhalation of an aerosol of, bronchoconstriction induced by, in the anaesthetized dog, effect of lignocaine on effect of sodium cromoglycate on, 569
- effect of, on calf isolated coronary artery and cardiac vein, 193
- —, relaxation of rabbit trachea by, 465P

- —, effect of pretreatment with, on the fate of intraduodenally instilled [14C]-tyramine in the cat, 454P
- ---, effects of, on responses of rabbit ear artery to electrical stimulation and to exogenous noradrenaline, 329
- Histamine H₂-receptor blocking drugs, effects of, on noradrenergic transmission in the isolated aorta of rabbit and atria of the guinea-pig, 535
- Histamine H₂-receptors, evidence for relaxation of rabbit trachea mediated by, 465P
- **Histamine receptors,** role of, during adjuvant arthritis in rats, 446P
- , heterogeneity among, in guinea-pig atrium, rat uterus or mouse stomach, 59
- —, role of, in contractile responses of rabbit ear artery, 329
- Home Office Licensees, audio-visual teaching material used on courses for new, 504P
- **L-Homocysteate**, effect of, on synaptic activity in isolated hemisected spinal cords of frogs, 591
- L-Homocysteine sulphinate, effect of, on synaptic activity in isolated hemisected spinal cords of frogs, 591
- Homovanillic acid, striatal, effect of atropine on, during catalepsy induced by tetrabenazine and butyrophenone, 309
- —, in rat and mouse brain effects of a butyrophenone derivative and tetrabenazine on, 115
- effects of chronic administration of antidepressants on synthesis of, in rat brain, 435P
- Horse plasma, (sensitizing antigen), reactivity of isolated coronary artery and cardiac vein of calf to, 193
- **Hydralazine**, effect of, on function of pyridoxal-5'-phosphate in rat kidney preparation, 453P
- inhibitory presynaptic effects of, on noradrenergic nerve terminals of the rat tail artery, 418P
- Hydraulic and mechanical models, student-constructed, for learning fundamentals of pharmacokinetics, 501P
- Hydrocortisone, effect of, on incorporation of arachidonic acid into phospholipids, neutral lipids and triglycerides in fat cell ghosts from rabbit adipose tissue, 393
- Hydrogen ions, control excitation in rat corticofugal neurones produced by, effects of DL-α-aminoadipate on, 545
- **Hydroxy analogues,** of oxytocin and of lysine-vasopressin, 575
- **6-Hydroxydopamine,** effect of, on cobalt-induced epilepsy in the rat, 353
- 5-Hydroxyindol-3-ylacetic acid, in rat forebrain, effect of tryptophan on, during catalepsy induced by tetrabenazine and butyrophenone, 309
- in rat and mouse brain, effects of a butyrophenone derivative and tetrabenazine on, 115
- Hydroxyprogesterone, derivatives of, ouabain receptor binding of, in dog heart, 345
- 5-Hydroxytryptamine, anaphylactic responses to, in rat skin, peritoneum, mast cell and human lung tissue, effect of salbutamol and disodium cromoglycate on, 23
- cerebral, influence of, on catalepsy induced by brain amine depleting neuroleptics or by cholinomimetics in rat and mouse, 309
- presynaptic inhibitory action of, on dog isolated saphenous vein, 247
- in rat and mouse brain, effects of a butyrophenone derivative and tetrabenazine on, 115

- release of, effect of, on effect of atropine on gastric acid secretion stimulated by bethanecol in isolated mouse stomach, 59
- response of isolated aorta of the rabbit and atria of the guinea-pi_b α, effects of histamine H₂-receptor blocking drugs o_{1...} 535
- effects of chronic administration of antidepressants on synthesis of, in rat brain, 435P
- , effect of, on calf isolated coronary artery and cardiac vein, 193
- release of, in central nerve endings, evidence for an autoreceptor-mediated presynaptic control of, 424P
- presynaptic receptor for, in dog isolated saphenous vein, preliminary characterization of, 423P
- —, release of, from rat hippocampus, by α-methyltryptamine, 438P
- ---, effect of, on excitation-contraction coupling in rabbit pulmonary vascular smooth muscle, 467P
- effects of α-monofluoromethyldopa on, in mouse brain, heart and kidney, 460P
- [³H]-5-hydroxytryptamine, concomitant development of uptake systems for, and [³H]-dopamine in rat brain regions, 387
- 5-Hydroxytryptamine antagonists, putative, effects of, on corticosterone secretion in intact rat, 489P
- **5-Hydroxytryptamine receptors,** some properties of, in the hindquarters of the rat, 79
- 5-Hydroxytryptophan, effect of, on catalepsy induced by tetrabenazine and butyrophenone in the rat and mouse, 309
- , hypoglycaemic effect of, does it involve insulin in mice?, 488P
- 5-Hydroxy-L-tryptophan, effect of, on corticosterone secretion in intact rat, 489P
- **Hyoscine**, effect of, on effect of theophylline on effects of purines and intramural inhibitory nerve stimulation in intestine of guinea-pig and rabbit, 301
- Hypocholesterolemic effects, of vitamin C, clofibrate and diosgenin in male guinea-pigs, 456P
- Hypoglycaemic effect, of 5-hydroxytryptophan, does it involve insulin in mice?, 488P
- **Hypotension,** 7-propyl-theophylline-dopamine in the treatment of, 239
- Hypotensive effect, of clonidine and α-methyldopa, in spontaneously hypertensive rats, reversal by naloxone, 161
- Hypothermia, produced by lergotrile or apomorphine, antagonism of, by dopamine antagonists in mice, 434P
- endogenous dopamine-mediated, in the rat, evidence for, 605
- induced by clonidine in the rat, receptors mediating, 133
- Hypoxia, isolated perfused rabbit heart suffering from, sensitizing effect of sodium palmitate to an induced arrhythmia in, 411P
- **Hypoxic medium,** effects of diltiazem and verapamil on the mechanical performance of the rabbit myocardium perfused with, 485P

I

(±)-**Ibotenate**, effect of, on synaptic activity in isolated hemisected spinal cords of frogs, 591

ICI 118,587, a novel β -adrenoceptor partial antagonist, cardiovascular activity of, in the dog, 412P

Ileal region, of the isolated blood-perfused small intestine of the rat, contractile action of histamine on, 587

Ileum, guinea-pig, effects of purines and transmural stimulation on, effect of theophylline on, 301

- guinea-pig, effects of high pressure helium and nitrogen on release of acetylcholine from, 221
- guinea-pig, smooth muscle of, effects of calcium and magnesium ions, temperature and repetitive stimulation on inhibitory junctional transmission in, 39
- guinea-pig, effects of inert gases and other general anaesthetics on the release of acetylcholine from, 229
- rat, modulation of spontaneous and acetylcholineinduced contractions of, by betamethasone, 448P
- guinea-pig, does a prostaglandin modulate cholinergic transmission in?, 464P
- cat, effects of bradykinin and isoprenaline on capillary filtration in, 361
- rat isolated, longitudinal muscle of, effects of prostaglandins on contractile action of bradykinin on, 527

Imipramine, effect of, on evoked overflow and contractile response to electrical stimulation in mouse vas deferens incubated with tritiated noradrenaline, 511

[³H]-imipramine, specific binding of, in rat brain, 434P Indomethacin, effect of, on effects of prostaglandins E₂ and I₂ on human lymphocyte transformation, 17

- an inhibitor of prostaglandin synthesis, effect of, on effect of bradykinin on adrenergically induced vasoconstriction in the isolated perfused kidney of the rabbit, 269
- comparison of abilities of, flurbiprofen and acetylsalicyclic acid to inhibit the release reaction and prostaglandin synthesis in human blood platelets, 73
- relationship between ulcerogenic and anti-inflammatory properties of, influence of fasting and cimetidine on, in rat, 33
- action of salmon calcitonin on gastric ulceration induced by, in the rat, 483P
- effect of, on synthesis of prostaglandins and lipoxygenase products in fat cell ghosts from rabbit adipose tissue, 393
- effect of, on cataleptic effects of Δ'-tetrahydrocannabinol and chlorpromazine in mice, 379
- failure of, to alter ACTH-induced adrenal hyperaemia or steroidogenesis in the anaesthetized dog, 217
- treatment of rat with, correlation between the rise in acute phase proteins and histological evidence of ulceration following, 450P
- —, effect of, on tuberculin pleurisy in the guinea-pig, 447P
- action of, on the inflammatory response in adjuvant rats, 446P
- effect of, on neurogenic vasodilatation induced in canine paw pad by electrical stimulation, 337
- effect of, on contractile action of bradykinin on longitudinal muscle of rat isolated ileum, 527

Inert gases, effects of, on the release of acetylcholine from guinea-pig ileum, 229

Inflammatory response, in adjuvant rats, actions of cimetidine, mepyramine, indomethacin and aprotinin on, 446P

Inhibitory junctional potential, nonadrenergic and noncholinergic, in smooth muscle of guinea-pig small intestine, effects of calcium and magnesium ions, temperature and repetitive stimulation on, 39

Insulin, does the hypoglycaemic effect of 5-hydroxytryptophan involve, in mice?, 488P

- secretion of, from the perfused rat pancreas, inhibition of, by pizotifen, 265
- effect of, on ouabain receptor binding in dog heart, 345

Intestine, of rabbit and guinea-pig, theophylline antagonizes some effects of purines in, but not those of intramural inhibitory nerve stimulation, 301

Intramural nerves, in rabbit duodenum and guinea-pig taenia caeci and fundic strip, field stimulation of, effect of theophylline on, 301

Ionic environment, effect of, on antagonist binding to cardiac β -adrenoceptors in pig heart, 416P

Iontophoresis, relative contribution of, and electro-osmosis to electrophoretic release of noradrenaline from multi-barrelled micropipettes, 478P

Iprindole, effect of, on evoked overflow and contractile response to electrical stimulation in mouse vas deferens incubated with tritiated noradrenaline, 511

—, effect of, on specific binding of [³H]-imipramine in rat brain, 434P

Isobutyl methyl xanthine, effect of, on spinal transmission of nociceptive information in cat, 51

Isoguvacine, effect of, on binding of γ-aminobutyric acid to calf superior cervical ganglia, 445P

Isolation, in young rats, neurochemical effects of fluphenazine decanoate in, 439P

Isoprenaline, effect of, on responses of isolated rat uterus to acetylcholine, 13

- responses of sheep coronary arteries to, effects of uptake inhibitors on, 553
- cardiovascular actions of, in the rat, effects of propranolol and practolol on, 367
- --, effect of, on calf isolated coronary artery and cardiac vein, 193
- -, effect of, on rat isolated uterus, 466P
- , effect of, on capillary filtration in cat small intestine, 361
- --, effect of, on isolated strips of rabbit splenic artery, 474P
- (-)-Isoprenaline, analysis of the activity and distribution
 of, in the rat using an ex vivo receptor binding assay,
 415P
- effect of, on ouabain receptor binding in dog heart, 345

K

Kainate, effect of, on synaptic activity in isolated hemisected spinal cords of frogs, 591

Ketamine, anaesthesia and analgesia induced by, in the rat, effects of physostigmine and neostigmine on, 426P

effects of, on noradrenergic transmission and the response to noradrenaline in rat smooth muscle, 462P

Ketocyclazocine, assessment of physical dependence in rats after continuous intraperitoneal infusion of, 427P

Kidney, perfused rabbit isolated, attenuation by bradykinin of adrenergically induced vasoconstriction in, relationship to prostaglandin synthesis, 269 Köl173, (mexiletine), electrophysiological actions of, on canine cardiac Purkinje fibres and ventricular muscle, 143

Kymograph, Palmer, further electronic evolution of, 506P
 Kynurenine aminotransferase, effects of penicillamine, hydrallazine and phenelzine on, in rat kidney preparation, 453P

L

- **Labetalol,** β -adrenoceptor agonist activity of, on isolated uterus of the rat, 13
- , effect of, on responses of isolated rat uterus to acetylcholine, 13
- effect of, on sedation induced by clonidine in the rat, 133
- Lanthanum ion, effect of, on binding of agonists and antagonists to muscarinic receptors in rat brain, 371
- Lead ion, effect of, on binding of agonists and antagonists to muscarinic receptors in rat brain, 371
- **Leptazol**, antagonism by, of the post-synaptic actions of γ-aminobutyric acid in guinea-pig olfactory cortex, 443P
- Lergotrile, hypothermia produced by, or apomorphine, antagonism of, by dopamine antagonists in mice, 434P
- Lesions, of the ventromedial nucleus of the thalamus, dopamine-mediated circling behaviour is modulated by, 432P
- unilateral 5,7-dihydroxytryptamine-induced, of the rat dorsal raphe nucleus, differential rotational behaviour after, 431P
- Leu-enkephalin, effect of, on field stimulated isolated rat rectum, 428P
- Leukocytes, vitamin C in, in Italians at different periods in the year, 495P
- Levallorphan, effect of, on ouabain receptor binding in dog heart, 345
- Levamisole, effect of, on tuberculin pleurisy in the guineapig, 447P
- Levorphanol, effect of, on ouabain receptor binding in dog heart, 345
- Lignocaine, electrophysiological actions of, on canine heart, compared with those of mexiletine (Kö1173), 143
- effect of, on effect of sodium cromoglycate on lung irritant receptors and left ventricular cardiac receptors in the anaesthetized dog, 569
- **Lipase activating agents,** effects of, on release of arachidonic acid from fat cell ghosts from rabbit adipose tissue, 393
- **Lipids**, neutral, presence of radioactivity in, after infusion of [14C]-arachidonic acid in guinea-pig lungs, 519
- neutral, fatty acid release from, when rabbit fat cell ghosts were stimulated by adrenocorticotrophic hormone, 393
- **Liposomes**, distribution and fate in the rabbit of, containing [131]-sodium iodide, 459P
- phosphatidylserine, pharmacological effects of, in the rat, role of lysophosphatidylserine, 611
- Lipoxygenase products, synthesis of, in fat cell ghosts from rabbit adipose tissue, effect of indomethacin on, 393

- Lisuride, effect of, on cobalt-induced epilepsy in the rat, 353
- **Lithium ion,** effect of, on binding of agonists and antagonists to muscarinic receptors in rat brain, 371
- Liver, guinea-pig, comparison of effects of 2-2'-pyridylisatogen, 2-phenylisatogen and papaverine on calciumstimulated respiration in mitochondria isolated from, 480P
- —, rat, mixed-function oxygenases from, effects of β adrenoceptor antagonists on, 451P
- —, rat, influence of betamethasone concentration of digoxin in, 491P
- Locomotor activity, effects of dopamine receptor agonists and antagonists on, in the rat, 430P
- Locomotor hyperactivity, demonstration of ability of apomorphine to act on dopamine receptors on nerve terminals in rat nucleus accumbens to reduce, 475P
- Longitudinal muscle, of rabbit duodenum, guinea-pig taenia caeci and fundic strip, effects of purines and intramural inhibitory nerve stimulation on, effect of theophylline on, 301
- , of rat isolated ileum, effects of prostaglandins on contractile action of bradykinin on, 527
- **Luteinising hormone**, release of, from adenohypophysis of male rats, effect of urethane and pentobarbitone on, *in vitro*, 277
- , effect of, on ouabain receptor binding in dog heart, 345
- **Luteinising hormone-releasing hormone,** inhibition by pentobarbitone and urethane of the *in vitro* response of the adenohypophysis to, in male rats, 277
- Lung, guinea-pig chopped, non-immunological release of a slow-reacting substance from, 67
- Lung irritant receptors, effect of sodium cromoglycate on, in the anaesthetized dog, 569
- Lung tissue, human, a comparison of the anti-anaphylactic activities of salbutamol and disodium cromoglycate in, 23
- **Lungs,** guinea-pig, incorporation and metabolism of $[^{14}C]$ -arachidonic acid in, 519
- **Lymph flow,** in isolated cat ileum, effects of bradykinin and isoprenaline on, 361
- **Lymphocyte**, human, transformation of, in the presence and absence of inhibitors of prostaglandin biosynthesis, effects of prostaglandins E₂ and I₂ on, 17
- **Lysophosphatidylserine**, role of, in pharmacological effects of phosphatidylserine liposomes in the rat, 611

M

- Magnesium, urinary excretion of, during amiloride administration in saline-loaded rats, 493P
- **Magnesium ion,** effect of, on inhibitory junctional transmission in smooth muscle of guinea-pig small intestine, 39
- —, effect of, on binding of agonists and antagonists to muscarinic receptors in rat brain, 371
- —, effect of, on antagonist binding to cardiac β-adrenoceptors in pig heart, 416P
- effect of, on effects of excitatory amino acids on isolated hemisected spinal cords of frogs, 591
- Malignant hyperthermia syndrome, halothane-initiated, althesin as an anaesthetic in experimental animals susceptible to, 425P

- Mammary gland, rat, biological activity of hydroxy analogues of oxytocin and of lysine-vasopressin in, 575
- Mammary strip, rat, biological activity of hydroxy analogues of oxytocin and of lysine-vasopressin in, 575
- Maprotiline, effect of chronic administration of, on synthesis of monoamines in rat brain, 435P
- effect of, on evoked overflow and contractile response to electrical stimulation in mouse vas deferens incubated with tritiated noradrenaline, 511
- Mast cell, rat, a comparison of anti-anaphylactic activities of salbutamol and disodium cromoglycate in, 23
- Mebanazine, effect of pretreatment with, on the fate of intraduodenally instilled [14C]-tyramine in the cat, 454P
- Mecamylamine, effect of, on contractile response of dog isolated saphenous vein to electrical stimulation, 247
- Medroxyprogesterone acetate, effect of, on ouabain receptor binding in dog heart, 345
- **Medulla,** rat, interactions of (+)-amphetamine and chlor-promazine in, 165
- **Megesterol acetate**, effect of, on ouabain receptor binding in dog heart, 345
- **Mepyramine**, effect of, on contractile action of histamine on ileal region of the isolated blood-perfused small intestine of the rat, 587
- —, effect of, on propranolol-induced bronchospasm in the guinea-pig and rat, 488P
- , effect of, on anaphylactic reaction in calf isolated coronary artery, 193
- -, protective effect of, against streptolysin O in mice, 173
- action of, on the inflammatory response in adjuvant rats, 446P
- effect of, on relaxation of rabbit trachea by histamine, 465P
- , plus burimamide effects of, on neurogenic vasodilatation induced in canine paw pad by electrical stimulation, 337
- Mercury ion, effect of, on binding of agonists and antagonists to muscarinic receptors in rat brain, 371
- Metanephrine, effect of, on noradrenaline clearance in the rabbit, 452P

 Metaraminol, effect of, on responses of sheep coronary
- **Metaraminol,** effect of, on responses of sheep coronary arteries to catecholamines and sympathetic nerve stimulation, 553
- Met-enkephalin, effect of, on field stimulated isolated rat rectum, 428P
- **Methadone**, effect of, on ouabain receptor binding in dog heart, 345
- **Methergoline**, effect of, on corticosterone secretion in intact rat, 489P
- **Methiothepin,** effect of, on release of 5-hydroxytryptamine from rat hypothalamic synaptosomes, 424P
- **Methoxamine**, effect of, on sedation induced by clonidine in the rat, 133
- 3-Methoxy-4-hydroxyphenyl-glycol, effects of chronic administration of antidepressants on synthesis of, in rat brain, 435P
- N-methyl-D-aspartate, effect of, on synaptic activity in isolated hemisected spinal cords of frogs, 591
- **3-Methylcholanthrene**, effect of, on hepatic mixed-function oxygenases in the rat, 451P
- α-Methyldopa, hypotensive effect of, in spontaneously hypertensive rats, reversal by naloxone, 161

- [3H]-methylhyoscinium, binding of, to muscarinic receptors in rat brain, effects of ions on, 371
- (-)-N-[³H]-methylscopolamine, binding of, to muscarinic receptors in rat brain, effects of ions on, 371
- α-Methyl-p-tyrosine, effect of, on corticosterone secretion in intact rat, 489P
- α-Methyltryptamine, release of 5-hydroxytryptamine from rat hippocampus by, 438P
- Methylxanthines, effects of, and adenosine 3',5'-cyclic monophosphate on spinal transmission of nociceptive information in cat, 51
- **Methysergide**, effect of, on hypothermic response to dopamine in the rat, 605
- effect of, on propranolol-induced bronchospasm in the guinea-pig and rat, 488P
- —, effect of, on corticosterone secretion in intact rat, 489P
- effect of, on catalepsy induced by tetrabenazine, butyrophenone, physostigmine and pilocarpine in the rat and mouse, 309
- effect of, on inhibitory effect of 5-hydroxytryptamine on contractile response of dog isolated saphenous vein to electrical stimulation, 247
- —, effect of, on 5-hydroxytryptamine receptors in the hindquarters of the rat, 79
- effect of, on release of 5-hydroxytryptamine from rat hypothalamic synaptosomes, 424P
- use of, to characterize the presynaptic receptor for 5-hydroxytryptamine in dog isolated saphenous vein, 423P
- —, protective effect of, against streptolysin O in mice, 173
- effect of, on anaphylactic reaction in calf isolated coronary artery, 193
- **Metiamide**, anomalous pK_B value for, in the isolated stomach of the mouse, analysis of, 59
- Metoclopramide, effect of, on neuronally released dopamine in the rabbit ear artery, 185
- Mexiletine, (Kö1173), electrophysiological actions of, on canine cardiac Purkinje fibres and ventricular muscle, 143
- Mianserin, effect of, on release of 5-hydroxytryptamine from rat hypothalamic synaptosomes, 424P
- —, effect of, on specific binding of [³H]-imipramine in rat brain, 434P
- effect of chronic administration of, on synthesis of monoamines in rat brain, 435P
- effect of, on evoked overflow and contractile response to electrical stimulation in mouse vas deferens incubated with tritiated noradrenaline, 511
- Midbrain, of developing rat, synaptosomal uptake mechanisms for [3H]-dopamine and [3H]-5-hydroxytryptamine in, 387
- MIF, (prolyl-leucyl-glycineamide) effect of, on neurones in rat substantia nigra and nucleus accumbens, 429P
- Mitochondria, calcium-stimulated respiration in, isolated from guinea-pig liver, comparison of effects of 2-2'-pyridylisatogen, 2-phenylisatogen and papaverine on, 480P
- Microcomputer, signal acquisition system based on, suitable for use in the pharmacological and physiological laboratory, 497P
- Micropipettes, multibarrelled, relative contribution of iontophoresis and electro-osmosis to the electrophoretic release of noradrenaline from, 478P

Microprocessor, simulator based on, for teaching pharmacokinetics, 502P

Microprocessors, implications of, for the curriculum in pharmacology, 504P

Microsomes, rat liver, effects of β -adrenoceptor antagonists on mixed-function oxygenases in, 451P

Microtubules, number of, in unmyelinated axons from rat sciatic nerve, effect of halothane on, 473P

Monoamine-depleting properties, of a new and very potent enzyme-activated irreversible inhibitor of aromatic amino acid decarboxylase: α-monofluoromethyldopa, 460P

Monoamine oxidase, contribution of, to noradrenaline clearance in the rabbit, 452P

 resistance to enzymatic breakdown by, as effect of 7-propyl-theophylline-dopamine on pressor response in the cat, 239

Monoamine oxidase-B, activity of, in rat lung during the oestrous cycle, effects of exogenous ovarian steroids on, 109

Monoamine oxidase inhibitors, effects of pretreatment with, on the fate of intraduodenally instilled [14C]-tyramine 454P

amine, 454P

Monoamino dicarboxylic acids, effects of, on synaptic activity in isolated hemisected spinal cords of frogs, 591

Monoamines, synthesis of, in rat brain, effects of chronic administration of antidepressants on, 435P

 , rat and mouse brain, production of catalepsy and depletion of, by a butyrophenone derivative, 115

α-Monofluoromethyldopa, inhibition of peripheral sympathetic function by, an irreversible inhibitor of aromatic amino acid decarboxylase, 461P

 , a new and very potent enzyme-activated irreversible inhibitor of aromatic amino acid decarboxylase, monoamine-depleting properties of, 460P

Morphine, effect of, on inhibitory effect of 5-hydroxytryptamine on contractile response of dog isolated saphenous vein to electrical stimulation, 247

 , analgesia induced by, in rats, antagonism of, by muscimol, 103

 -- , effect of, on effects of methylxanthines and adenosine 3',5'-cyclic monophosphate on spinal transmission of nociceptive information in cat, 51

 effect of, on contractile action of histamine on ileal region of the isolated blood-perfused small intestine of the rat, 587

assessment of physical dependence in rats after continuous intraperitoneal infusion of, 427P

 , neuronal depressant effects of, may be mediated by adenosine, 476P

 , effect of, on ouabain receptor binding in dog heart, 345

Muscarinic cholinoceptors, in mouse isolated stomach, role of, in effect of atropine on gastric acid secretion stimulated by bethanecol, 59

Muscarinic receptors, effects of ions on the binding of agonists and antagonists to, in rat brain, 371

 —, presynaptic, effect of amitriptyline on, in dog saphenous vein, 422P

Muscimol, antagonism by, of morphine analgesia in rats,

 biphasic effect of, on haloperidol-induced catalepsy in rat, 442P , binding of, to calf superior cervical ganglia, effect of sodium on, 445P

Myenteric nerve plexus, histamine produces fast contraction of rat isolated blood-perfused ileum by acting on, involving cholinergic interneurones, 587

Myocardial contractility, reduced, of shock, 7-propyl-theophylline in the treatment of, 239

Myocardium, guinea-pig, electrophysiological effects of bunaphtine on, 410P

 rabbit, effects of diltiazem and verapamil on the mechanical performance of, perfused with an oxygenated and a hypoxic medium, 485P

 cat, effects of 7-propyl-theophylline-dopamine on, in vivo, 239

Myoclonus, in rat forepaw, picrotoxin-induced, modulation of, by benzodiazepines, 440P

Myocrisin, effect of, on tuberculin pleurisy in the guineapig, 447P

N

Nalorphine, effect of, on ouabain receptor binding in dog heart, 345

Naloxone, reverses the antihypertensive effect of clonidine, 161

 , effect of, on ouabain receptor binding in dog heart, 345

Naphazoline, effect of, on sedation induced by clonidine in the rat, 133

Negative feedback function, of presynaptic adrenoceptors in a vascular tissue, 401

Neostigmine, effect of, on ketamine anaesthesia and analgesia in the rat, 426P

-, effect of, on excitatory actions of acetylcholine on heart 3

 , contracture produced in bovine tracheal smooth muscle by, 464P

 , an effect of, on the response of the rat anococcygeus muscle to field stimulation, 463P

-, effect of, on the rat isolated uterus, 466P

Nerve stimulation, relaxation of guinea-pig stomach fundic strips by, lack of antagonism by theophylline or ATP treatment, 293

 intramural inhibitory, theophylline antagonizes some effects of purines in the intestine but not those of, 301

 cardioaccelerator, in spinal dogs, effects of clonidine, prazosin and phentolamine on heart rate and coronary sinus catecholamine concentration during, 283

Neurochemical effects, of fluphenazine decanoate in socially-reared and isolated young rats, 439P

Neurohypophysial hormones, importance of primary amino group for biological activity and metabolism of, in the rat, 575

Neuroleptic, phenothiazine, neurochemical effects of, in socially reared and isolated young rats, 439P

Neuroleptics, effects of, with central dopamine and noradrenaline receptor blocking properties in L-DOPA and (+)-amphetamine-induced waking EEG in the rat, 87

 brain amine depleting, influence of cerebral 5-hydroxytryptamine on catalepsy induced by, in rat and mouse, 309

- Neuromuscular blocking action, of some cyclic analogues of choline, in rat phrenic nerve-hemidiaphragm preparation, 498P
- Neuromuscular transmission, in rat, chick and mouse, effects of venom of the green mamba, *Dendroaspis angusticeps*, on 199
- Neuronal depressant effects, adenosine may mediate, of morphine 476P
- Neurones, in lower brain stem of the rat, interactions of (+)-amphetamine and chlorpromazine on, 165
- Neurotransmitters, amino acids as, of corticofugal neurones in the rat, a comparison of glutamate and aspartate, 545
- Neutral lipids, presence of radioactivity in, after infusion of [14C]-arachidonic acid in guinea-pig lungs, 519
- , arachidonic acid release from, when rabbit fat cell ghosts were stimulated by adrenocorticotrophic hormone, 393
- Nialamide, effect of pretreatment with, on the fate of intraduodenally instilled [14C]-tyramine in the cat, 454P
- Nimodipine, (BAY e 9736), a new calcium antagonist, cellular mechanism of action of, 409P
- (\pm)-Nipecotic acid, effect of, on binding of γ -aminobutyric acid to calf superior cervical ganglia, 445P
- Nitrogen, effect of, on release of acetylcholine from guineapig ileum, 229
- high pressure, effects of, on release of acetylcholine from guinea-pig ileum, 221
- Nitromifene citrate, effect of, on ouabain receptor binding in dog heart, 345
- Nitrous oxide, effect of, on release of acetylcholine from guinea-pig ileum, 229
- Nociceptive information, spinal transmission of, in cat, effects of methylxanthines and adenosine 3'.5'-cyclic monophosphate on, 51
- Non-immunological release, of slow-reacting substance from guinea-pig lungs, 67
- Noradrenaline, exogenous, effects of histamine on responses of rabbit ear artery to, 329
- release of, effect of, on presynaptic oxymetazolinesensitive and -insensitive α-adrenoceptors in isolated rat atria, 419P
- effect of fluphenazine decanoate on brain concentration of, in socially reared and isolated young rats, 439P
- , effects of chronic administration of antidepressants on synthesis of, in rat brain, 435P
- —, pressor responses to, in anaesthetized cats and pithed rats, effects of prazosin and yohimbine on, 207
- —, effect of, on neurones in the lower brain stem of the rat, effect of chlorpromazine on, 165
- —, in rat and mouse brain, effects of a butyrophenone derivative and tetrabenazine on, 115
- effect of, on longitudinal muscle from rabbit duodenum and guinea-pig taenia caeci and fundic strip, effect of theophylline on, 301
- vasoconstriction induced by, in isolated perfused kidney of the rabbit, effect of bradykinin on, in the presence of indomethacin, an inhibitor of prostaglandin synthesis, 269
- concentration of, in coronary sinus of spinal dogs, effects of clonidine, prazosin and phentolamine on, during cardioaccelerator nerve stimulation, 283

- release of, from postganglionic noradrenergic nerves, contractile response of dog isolated saphenous vein to electrical stimulation mediated through, 247
- effects of α-monofluoromethyldopa on, in mouse brain, heart and kidney, 460P
- response of rat smooth muscle to, effects of ketamine on, 462P
- , clearance of, in the rabbit, quantitative analysis of, 452P
- , effect of, on isolated strips of rabbit splenic artery, 474P
- electrophoretic release of, from multibarrelled micropipettes, relative contribution of iontophoresis and electro-osmosis to, 478P
- responses of sheep coronary arteries to, effects of uptake inhibitors on, 553
- response of isolated aorta of the rabbit and atria of the guinea-pig to, effects of histamine H₂-receptor blocking drugs on, 535
- role of, in corticosterone secretion in intact rat, 489P
- --, effect of, on ouabain receptor binding in dog heart, 345
- (-)-Noradrenaline, effect of, on evoked overflow and contractile response to electrical stimulation in mouse vas deferens incubated with tritiated noradrenaline, 511
- [3H]-noradrenaline, release of, from rat cerebral cortex, effects of cocaine and desipramine on clonidine-induced inhibition of, 417P
- release of, from renal artery strips from cattle, effect of phenoxybenzamine on, 401
- ---, binding of, to synaptosomal fractions of rat brain homogenates, 497P
- Noradrenaline receptor blocking properties, central, effects of neuroleptics with, in L-DOPA and (+)-amphetamine-induced waking EEG in the rat, 87
- Noradrenergic nerve terminals, inhibitory presynaptic effects of hydralazine on, of the rat tail artery, 418P
- Noradrenergic transmission, effects of ketamine on, in rat smooth muscle, 462P
- in the isolated aorta of the rabbit and atria of the guinea-pig, effects of histamine H₂-receptor blocking drugs on. 535
- —, negative feedback effect of presynaptic α -adrenoceptors on, 401
- Normorphine, effect of, on field stimulated rat rectum, 428P
- Nortryptyline, effect of, on evoked overflow and contractile response to electrical stimulation in mouse vas deferens incubated with tritiated noradrenaline, 511
- Nu 683, effect of, on excitatory actions of acetylcholine on heart, 3
- **Nucleus accumbens,** rat, effects of dopamine receptor agonists and antagonists in, 430P
- -, rat, effects of peptides on, 429P
- rat, demonstration of ability of apomorphine to act on dopamine receptors on nerve terminals in, to reduce locomotor hyperactivity, 475P
- —, rat, thyrotrophin releasing hormone stimulates release of [³H]-dopamine from slices of, in vitro, 323

O

- Octanol, effect of, on acetylcholine release from guinea-pig ileum, 229
- Oestradiol-17β, effect of, on the development of mouse embryos cultured over collagen, 458P
- —, effect of, on metabolism of β-phenylethylamine in rat lung during the oestrous cycle, 109
- effect of, on responses of sheep coronary arteries to catecholamines and sympathetic nerve stimulation, 553
- —, -17α and -17β effect of, on ouabain receptor binding in dog heart, 345
- Oestriol, effect of, on ouabain receptor binding in dog heart, 345
- Oestrone, effect of, on ouabain receptor binding in dog heart, 345
- **Oestrous cycle,** effect of, on metabolism of β -phenylethylamine in rat lung, 109
- Olfactory cortex, guinea-pig, antagonism by leptazol of the post-synaptic actions of γ -aminobutyric acid in, 443P
- Opiate receptors, characterization of, in isolated rat rectum, 428P
- —, involvement of, in central α-adrenoceptor stimulation in spontaneously hypertensive rats, 161
 Oral activity, in mice, of Δ'-tetrahydrocannabinol and its
- dependence on prostaglandin E_2 , 379

 Org 6582, effect of chronic administration of, on synthesis
- of monoamines in rat brain, 435P
 Org GC 94, effect of, on evoked overflow and contractile
- response to electrical stimulation in mouse vas deferens incubated with tritiated noradrenaline, 511
- Ouabain, protective effect of, against streptolysin O in mice, 173
- Ouabain receptor binding, of hydroxy-progesterone derivatives in dog heart, 345
- Ovarian steroids, exogenous, effects of, on metabolism of β -phenylethylamine in rat lung during the oestrous cycle, 109
- Oxotremorine, effect of, on corticosterone secretion in intact rat, 489P
- Oxygenases, hepatic mixed-function, effects of β -adrenoceptor antagonists on, in the rat, 451P
- Oxymetazoline, effect of, on arterial blood pressure, heart rate and tension of anococcygeus muscle of rat, 421P
- —, presynaptic α-adrenoceptors sensitive and insensitive to, in isolated rat atria, 419P
- Oxytetracycline, effect of, on responses of sheep coronary arteries to, catecholamines and sympathetic nerve stimulation, 553
- Oxytocin, hydroxy analogues of, biological activity of, in rat uterus, mammary strip and mammary gland, 575

P

- Palmer Kymograph, further electronic evolution of, 506P Pancreas, perfused rat, inhibition of insulin secretion from, by pizotifen, 265
- Pancuronium, effect of, on effect of electrical stimulation of cut tibial nerve on femoral blood flow in anaesthetized dog, 337

- Papaverine, comparison of effects of, 2-2'-pyridylisatogen, 2-phenylisatogen and, on calcium-stimulated respiration in mitochondria isolated from guinea-pig liver, 480P
- Paraoxon, effect of, on excitatory actions of acetylcholine on heart, 3
- Parygline, effect of, on noradrenaline clearance in the rabbit, 452P
- Paw pad, canine, evidence for dopaminergic vasodilator innervation of, 337
- Penicillamine, effect of, on tuberculin pleurisy in the guinea-pig, 447P
- effect of, on function of pyridoxal-5'-phosphate in rat kidney preparation, 453P
- Pentobarbitone, inhibition by, and urethane, of the *in vitro* response of the adenohypophysis to luteinising hormone-releasing hormone in male rats, 277
- Peptides, effects of, on neurones in rat substantia nigra and nucleus accumbens, 429P
- **Peritoneum**, rat, a comparison of the anti-anaphylactic activities of salbutamol and disodium cromoglycate in, 23
- **Pharmacokinetics**, a microprocessor-based simulator for teaching, 502P
- —, student-constructed hydraulic and mechanical models for learning fundamentals of, 501P
- Phenelzine, effect of, on function of pyridoxal-5'-phosphate in rat kidney preparation, 453P
- Phenobarbitone, effect of, on acetylcholine release from guinea-pig ileum, 229
- Phenothiazine derivatives, protective effect of some, against streptolysin O in mice, 173
- Phenothiazine neuroleptic, neurochemical effects of, in socially reared and isolated young rats, 439P
- Phenothiazines, series of, effect of, on 5-hydroxytryptamine receptors in the hindquarters of the rat, 79
- Phenoxybenzamine, effect of, on release of [3H]-noradrenaline from renal artery strips from cattle, 401
- effect of, on propranolol-induced bronchospasm in the guinea-pig and rat, 488P
- —, effect of, on prejunctional clonidine-adenosine interactions in rat vas deferens, 492P
- Phentolamine, effect of, on sedation induced by clonidine in the rat, 133
- effect of, on 5-hydroxytryptamine receptors in the hindquarters of the rat, 79
- effect of, on heart rate and coronary sinus catecholamine concentration during cardioaccelerator nerve stimulation in spinal dogs, 283
- effect of, on contractile response of dog isolated saphenous vein to electrical stimulation, 247
- —, effect of, on hypothermic response to dopamine in the rat, 605
- —, effect of, on noradrenergic transmission in the isolated aorta of the rabbit and atria of the guinea-pig, 535
- —, effect of, on evoked overflow and contractile response to electrical stimulation in mouse vas deferens incubated with tritiated noradrenaline, 511
- **Phenylbutazone**, effect of, on cataleptic effects of Δ' -tetrahydrocannabinol in mice, 379
- Phenylephrine, effect of, on excitation-contraction coupling in rabbit pulmonary vascular smooth muscle, 467P

- --, effect of, on blood pressure, heart rate and tension of anococcygeus muscle of rat, 421P
- effect of, on sedation induced by clonidine in the rat,
 133
- pressor responses to, in anaesthetized cats and pithed rats, effects of prazosin and yohimbine on, 207
- 2-Phenylisatogen, comparison of effects of, 2-2'-pyridylisatogen and papaverine on calcium-stimulated respiration in mitochondria isolated from guinea-pig liver, 480P
- Phenytoin, pharmacokinetics of, in mice after single doses of Corynebacterium parvum, 471P
- Phosphatidylserine liposomes, pharmacological effects of, in the rat, role of lysophosphatidylserine, 611
- Phosphodiesterase, inhibition of, as effect of 7-propyl-theo-phylline-dopamine on cat myocardium in vivo, 239
- **Phospholipase A₂**, purified, from rat pancreas, activation of phosphatidylserine by, 611
- Phospholipidosis, chlorimipramine-induced, biochemical and pharmacokinetic observations in the rat, 449P
- Phospholipids, presence of radioactivity in, after infusion of [14C]-arachidonic acid in guinea-pig lungs, 519
- arachidonic acid release from, when rabbit fat cell ghosts were stimulated by adrenocorticotrophic hormone, 393
- Phrenic nerve-hemidiaphragm preparation, rat and mouse, effects of venom of the green mamba, *Dendroaspis angusticeps*, on, 199
- rat isolated, effect of diothiothreitol on anticholinesterase induced antidromic firing and twitch potentiation in, 481P
- rat, pharmacological activity of piperidine derivatives containing a choline-like moeity on cholinergic transmission in, 486P
- **Physostigmine,** catalepsy induced by, in rat, effects of p-chlorophenylalanine, methysergide and atropine on, 309
- effect of, on ketamine anaesthesia and analgesia in the rat, 426P
- Phytohaemagglutinin, reactivity of human peripheral blood mononuclear cells to, effects of indomethacin and eicosatetraynoic acid, effects of prostaglandins E₂ and I₂ on, 17
- **Picrotoxin,** forepaw myoclonus induced by, in the rat by benzodiazepines, modulation of, 440P
- Pilocarpine, catalepsy induced by, in mouse, effects of atropine, methysergide and 5-hydroxytryptophan on, 309
- Pimozide, effect of, on hypothermic response to dopamine in the rat, 605
- -, effect of, on cobalt-induced epilepsy in the rat, 353
- effect of, on L-DOPA and (+)-amphetamine-induced waking EEG in the rat, 87
- , antagonism by, of hypothermia produced by apomorphine or lergotrile in mice, 434P
- **Piperidine derivatives**, containing a choline-like moiety, pharmacological activity of, on cholinergic transmission in rat phrenic nerve-hemidiaphragm preparation, 486P
- **Piperonyl butoxide**, effect of, compared with that of cannabidiol on hepatic microsomal drug-metabolizing system in the mouse, 93
- **Piperoxane**, effect of, on corticosterone secretion in intact rat, 489P

- , effect of, on sedation induced by clonidine in the rat,
 133
- **Pizotifen**, inhibition of insulin secretion from the perfused rat pancreas by, 265
- pK_B values, analysis of anomalous, for metiamide and atropine in the isolated stomach of the mouse, 59
- Placenta, rat, homogenates of, contain a factor(s) which inhibits uterine arachidonic acid metabolism, 482P
- Plasma, lithium concentration in, comparison of, in guinea-pig and rat, 474P
- vitamin C in, in Italians at different periods in the year, 495P
- Plasma protein, concentration of, in isolated cat ileum, effects of bradykinin and isoprenaline on, 361
- Platelets, human blood, comparison of the abilities of acetylsalicylic acid, flurbiprofen and indomethacin to inhibit the release reaction and prostaglandin synthesis in, 73
- Pleurisy, tuberculin, in the guinea-pig, effects of some antirheumatic agents on, 447P
- Polymorphonuclear leucocytes, rat, effects of dibutyryl cyclic AMP on chemotaxis and chemokinesis of, 472P
- Pons, lower, in the rat, interactions of (+)-amphetamine and chlorpromazine in, 165
- Portal vein segments, rat, vascular smooth muscle of, effect of urethane on, 255
- Potassium chloride, contractile action of, on longitudinal muscle of rat isolated ileum, effects of prostaglandin synthesis inhibitors on, 527
- contraction of vascular smooth muscle induced by, effect of urethane on, in rat aortic strips and portal vein segments, 255
- Potassium ion, effect of, on electrophysiological actions of mexiletine (Kö1173) on canine cardiac Purkinje fibres and ventricular muscle, 143
- -, effect of, on atrial fibrillation, 3
- —, effect of, on the binding of agonists and antagonists to muscarinic receptors in rat brain, 371
- —, effect of, on effect of quinidine on excitatory actions of acetylcholine on isolated auricles, 3
- —, acetylcholine release evoked by, in guinea-pig ileum, effects of high pressure helium and nitrogen on, 221
- Practolol, effect of, on effect of isoprenaline on cardiovascular system of the rat, 367
- , effect of, on hepatic mixed-function oxygenases in the rat, 451P
- Prazosin, effect of, on heart rate and coronary sinus catecholamine concentration during cardioaccelerator nerve stimulation in spinal dogs, 283
- -, effect of, on sedation induced by clonidine in the rat,
- effect of, on pressor response to phenylephrine and noradrenaline in anaesthetized cats and pithed rats, 207
- PRD-92-EA, a new anti-allergic agent, effect of, on anaphylactic reaction of calf isolated coronary artery. 193
- **Prednisolone**, effect of, on tuberculin pleurisy in the guineapig. 447P
- effect of, on ouabain receptor binding in dog heart,
 345

- **Prednisolone-3,20-bisguanyl-hydrazone**, effect of, on ouabain receptor binding in dog heart, 345
- **Preoptic region,** in the rat, evidence for the presence of a dopaminergic system which mediates a lowering of core temperature, 605
- **Progesterone**, effect of, on metabolism of β-phenylethylamine in rat lung during the oestrous cycle, 109
- —, effect of, on ouabain receptor binding in dog heart, 345
- Prolactin, effect of, on ouabain receptor binding in dog heart, 345
- **Prolyl-leucyl-glycineamide**, effect of, on neurones in rat substantia nigra and nucleus accumbens, 429P
- **Promazine**, effect of, on 5-hydroxytryptamine receptors in the hindquarters of the rat, 79
- Promethazine, protective effect of, against streptolysin O in mice. 173
- **Pronethalol,** effect of, on hepatic mixed-function oxygenases in the rat, 451P
- Propoxyphene, effect of, on ouabain receptor binding in dog heart, 345
- **Protriptyline**, effect of, on specific binding of [³H]-imipramine in rat brain, 434P
- Propranolol, effect of, on effect of isoprenaline and labetalol on responses of isolated rat uterus to acetylcholine,
- effect of, on cardiovascular effects of 7-propyl-theophylline-dopamine in the cat, 239
- (+) and (-), analysis of the activity and distribution
 of, in the rat using an in vivo receptor binding assay,
 415P
- -, effect of, on hepatic mixed-function oxygenases in the rat, 451P
- --, effect of, on isolated strips of rabbit splenic artery, 474P
- effect of, on neurogenic vasodilatation induced in canine paw pad by electrical stimulation, 337
- bronchospasm in guinea-pig and rat induced by, effects of sodium cromoglycate on, 488P
- effect of, on effect of isoprenaline on cardiovascular system of the rat, 367
- (-)-Propranolol, effect of, on binding of (-)-dihydroalprenolol to cardiac β-adrenoceptors in pig heart, 416P
- effect of, on corticosterone secretion in intact rat, 489P
- [14C]-propranolol, binding of, to synaptosomal fractions of rat brain homogenates, 497P
- [³H]-N-propylbenzylcholine, binding of, to muscarinic receptors in rat brain, effects of ions on, 371
- N-(2',3-[³H]-propyl)-N,N-dimethyl-2-aminoethyl benzilate, binding of, to muscarinic receptors in rat brain, effects of ions on, 371
- 7-Propyl-theophylline-dopamine, (D4975), cardiovascular pharmacology of, compared with dopamine and dobutamine in the cat, 239
- **Prostaglandin**, does a, modulate cholinergic transmission in the guinea-pig ileum? 464P
- **Prostaglandin** E₁, inhibition of synaptosomal ATPase by, may be dependent on a soluble factor, 455P
- Prostaglandin E_2 , dependence on, of oral activity of Δ -tetrahydrocannabinol in mice, 379

- **Prostaglandin-like substance**, release of, from rat isolated ileum, effects of aspirin and indomethacin on, 527
- release of, after stimulation of [14C]-arachidonic acid metabolism by slow-reacting substance of anaphylaxis, bradykinin or antigen challenge, in guinea-pig lungs, 519
- Prostaglandin synthesis, in human blood platelets, comparison of abilities of acetylsalicyclic acid, flurbiprofen and indomethacin to inhibit, 73
- , inhibitors of, effects of prostaglandins E₂ and I₂ on human lymphocyte transformation in the presence or absence of, 17
- relationship of, to attenuation by bradykinin of adrenergically induced vasoconstriction in the isolated perfused kidney of the rabbit, 269
- inhibitors of, effects of, on contractile action of bradykinin on longitudinal muscle of rat isolated ileum, 527
- **Prostaglandin synthesising enzymes,** in fat cell ghosts from rabbit adipose tissue, 393
- Prostaglandins, smooth muscle relaxant action of, the cat isolated trachea as a useful preparation for the study of, 412P
- —, role of, in steroidogenesis in anaesthetized dog, 217
- , effects of, on ouabain receptor binding in dog heart, 345
- , and the contractile action of bradykinin on the longitudinal muscle of rat isolated ileum, 527
- Prostaglandins E_1 and $F_{2\alpha}$, effects of, on cataleptic effects of Δ -tetrahydrocannabinol and chlorpromazine in mice, 379
- **Prostaglandins E₁, E₂ and F_{2\alpha},** effects of, on calf isolated coronary artery and cardiac vein, 193
- **Prostaglandins E₂ and F_{2a},** synthesis of, by fat cell ghosts from rabbit adipose tissue, 393
- Prostaglandins E₂ and I₂, effects of, on human lymphocyte transformation in the presence and absence of inhibitors of prostaglandin biosynthesis, 17
- Pulmonary artery, rabbit, smooth muscle from, effects of calcium ion withdrawal and verapamil on excitation-contraction coupling in, 467P
- Purine receptors, effects of enantiomers of 2-azido analogues of adenosine and adenine nucleotides on, in isolated taenia coli of guinea-pig, 153
- Purines, theophylline antagonizes some effects of, on the intestine but not those of intramural inhibitory nerve stimulation in guinea-pig and rabbit, 301
- Purkinje cells, in rat cerebellum, responses of, to excitatory amino acids, selective antagonism by benzodiazepines, 563
- Purkinje fibres, canine cardiac, electrophysiological actions of mexiletine (Kö1173) on, 143
- Pyridoxal-5'-phosphate, effects of penicillamine, hydrallazine and phenelzine on function of, in rat kidney preparation, 453P
- 2-2'-Pyridylisatogen, comparison of effects of, 2-phenylisatogen and papaverine on calcium-stimulated respiration in mitochondria isolated from guinea-pig liver, 480P
- Pyrogallol, effect of, on noradrenaline clearance in the rabbit, 452P
- Pyroglutamyl-histidyl-prolineamide, effect of, on neurones in the rat substantia nigra and nucleus accumbens, 429P

- **Quinidine**, effect of, on excitatory actions of acetylcholine on isolated auricles, 3
- (±)-3-Quinuclidinylbenzilate, binding of, to muscarinic receptors in rat brain, effects of ions on, 371
- Quisqualate, effect of, on synaptic activity in isolated hemisected spinal cords of frogs, 591

R

- Rabbit aorta contracting substance, release of, after stimulation of [14C]-arachidonic acid metabolism by slowreacting substance of anaphylaxis, bradykinin or antigen challenge, in guinea-pig lungs, 519
- Radioreceptor assay, sensitive for ouabain, in dog heart, 345
- Ranitidine, antagonism of vasodepressor and gastric secretory responses to histamine by, in the anaesthetized dog, 414P
- Raphe nucleus, dorsal rat, differential rotational behaviour after unilateral 5,7-dihydroxytryptamine-induced lesions of, 431P
- Receptor binding assay, ex vivo, analysis of the activity and distribution of β -adrenoceptor antagonists in the rat using, 415P
- **Rectum,** isolated rat, characterization of opiate receptors in, 428P
- Release reaction, induced by adenosine diphosphate, from human blood platelets, comparison of abilities of acetylsalycic acid, flurbiprofen and indomethacin to inhibit 73
- Renal artery, strips of, from cattle, an examination of the negative feedback function of presynaptic α-adrenoceptors in, 401
- Renal vasculature, of anaesthetized dog, pre- and postsynaptic activities of some dopamine analogues and related compounds, 421P
- Reserpine, effect of, on effect of high pressure helium and nitrogen on acetylcholine release from guinea-pig ileum, 221
- Respiration, calcium-stimulated, in mitochondria isolated from guinea-pig liver, comparison of effects of 2-2'-pyridylisatogen, 2-phenylisatogen and papaverine on, 480P
- Retractor penis muscle, bovine, inhibitory material in extracts from, is not an adenine nucleotide, 327
- Rhamnose, effect of, on ouabain receptor binding in dog heart, 345
- RO 2-7239, effect of, on ouabain receptor binding in dog heart, 345
- Rotational behaviour, differential, after unilateral 5,7-dihydroxytryptamine induced lesions of the dorsal raphe nucleus of the rat, 431P
- Rubidium ion, effect of, on binding of agonists and antagonists to muscarinic receptors in rat brain, 371

S

Salbutamol, a comparison of the anti-anaphylactic activities of, and disodium cromoglycate in the rat, the rat mast cell and in human lung tissue, 23

- Salicyclate, sodium, effect of a combination of, and aspirin on the rat stomach, 484P
- Saline, rats loaded with, urinary magnesium excretion during amiloride administration in, 493P
- Salmon calcitonin, action of, on indomethacin-induced gastric ulceration in the rat, 483P
- Saphenous vein, dog isolated, preliminary characterization of the presynaptic receptor for 5-hydroxytryptamine in, 423P
- , dog isolated, presynaptic inhibitory action of 5-hydroxytryptamine in, 247
- —, dog, effect of amitriptyline on presynaptic receptors in, 422P
- Scandium ion, effect of, on binding of agonists and antagonists to muscarinic receptors in rat brain, 371
- Sciatic nerve, rat, microtubule numbers in unmyelinated axons from, effect of halothane on, 473P
- Sedation, induced by clonidine in the rat, mediated by α_2 -adrenoceptors, 133
- Serum, rat, influence of betamethasone on concentration of digoxin in, 491P
- **Shock**, reduced myocardial contractility of, 7-propyl-theophylline-dopamine in the treatment of, 239
- Signal acquisition system, microcomputer-based, suitable for use in the pharmacological and physiological laboratory, 497P
- Skeletal muscle, of rat, chick and mouse, effects of venom of the green mamba, *Dendroaspis angusticeps*, on, 199
- SKF 525-A, effect of, compared with that of cannabidiol on hepatic microsomal drug-metabolizing system in the mouse, 93
- SKF 7690, effect of, on ouabain receptor binding in dog heart, 345
- SKF 38393, effect of, on rat nucleus accumbens, 430P
- Skin, rat, a comparison of the anti-anaphylactic activities of salbutamol and disodium cromoglycate in, 23
- Skin potential, of the guinea-pig, effect of vitamin C deficiency and supplementation on, 457P
- SL 76002, biphasic effect of, on haloperidol-induced catalepsy in rat, 442P
- Sleep-wake cycle, effects of neuroleptics with central dopamine and noradrenaline receptor blocking properties on, in the rat, 87
- **Sleeping time**, induced by hexobarbitone, development of tolerance to the prolongation of, caused by cannabidiol in the mouse, 93
- Slow reacting substance of anaphylaxis, release of, from rat peritoneum and human lung tissue, effect of salbutamol and disodium cromoglycate on, 23
- effect of, on metabolism of [14C]-arachidonic acid in guinea-pig lungs, 519
- , non-immunological release of a, from guinea-pig lungs, 67
- comparative studies on immunologically and nonimmunologically produced, from man, guinea-pig and rat, 179
- Small intestine, rat isolated blood-perfused, ileal region of, contractile action of histamine on, 587
- cat, effects of isoprenaline and bradykinin on capillary filtration in, 361

- —, guinea-pig, smooth muscle of, effects of calcium and magnesium ions, temperature and repetitive stimulation on inhibitory junctional transmission in, 39
- Smooth muscle, vascular, in vivo evidence for two distinct types of postsynaptic α-adrenoceptor in, in anaesthetized cats and pithed rats, 207
- of guinea-pig small intestine, inhibitory junctional transmission in, effects of calcium and magnesium ions, temperature and repetitive stimulation on, 39
- relaxant action of prostaglandins on, the cat isolated trachea as a useful preparation for the study of, 412P
- , peripheral and vascular, mechanism of action of nimodipine on, in rabbit, 409P
- , rat response of, to noradrenaline, and noradrenergic transmission in , effects of ketamine on, 462P
- bovine tracheal, contracture produced in, by anticholinesterases, 464P
- from rabbit pulmonary artery, effects of calcium ion withdrawal and verapamil on excitation-contraction coupling in, 467P
- Social rearing, in young rats, neurochemical effects of fluphenazine decanoate in, 439P
- Sodium, γ-aminobutyric acid receptor binding in calf peripheral nervous tissue independent of, 445P
- Sodium chloride, rats loaded with, urinary magnesium excretion during amiloride administration in, 493P
- Sodium cromoglycate, effect of, on propranolol-induced bronchospasm in guinea-pig and rat, 488P
- effects of, on lung irritant receptors and left ventricular cardiac receptors in the anaesthetized dog, 569
- [131]-sodium iodide, distribution and fate in the rabbit of liposomes containing, 459P
- Sodium ion, effect of, on binding of agonists and antagonists to muscarinic receptors in rat brain, 371
- —, effect of, on antagonist binding to cardiac β -adrenoceptors in pig heart, 416P
- effect of, on electrophysiological actions of mexiletine (Kö1173) on canine cardiac Purkinje fibres and ventricular muscle, 143
- Sodium palmitate, sensitizing effect of, to an induced arrhythmia in the isolated perfused hypoxic rabbit heart, 411P
- Sodium salicyclate, effect of a combination of, and aspirin on the rat stomach, 484P
- Sodium valproate, effect of, on metabolism of γ -aminobutyric acid in vivo in the mouse, 441P
- Somatostatin, effect of, on ouabain receptor binding in dog heart, 345
- Spinal cord, frog isolated, antagonism of excitatory amino acid-induced responses and of synaptic excitation in, 591
- autonomic outflow stimulation at different levels of, and the resulting cardiovascular, gut and bladder responses in the frog, 504P
- Spinal dogs, effects of clonidine, prazosin and phentolamine on heart rate and coronary sinus catecholamine concentration during cardioaccelerator nerve stimulation in, 283
- Spinal transmission, of nociceptive information in cat, effects of methylxanthines and adenosine 3',5'-cyclic monophosphate on, 51

- [³H]-spiperone, binding of, in membrane preparations from rat nucleus accumbens *in vitro*, effect of thyrotrophin releasing hormone on, 323
- Spirometer, Benedict Roth, transducer-adapted, for small animals, 506P
- Spiroperidol, effect of, on L-DOPA and (+)-amphetamineinduced waking EEG in the rat, 87
- Splenic artery, rabbit, isolated strips of, used to demonstrate a specific relaxant effect of dopamine, 474P
- Stereoselective blockade, of cerebral dopamine receptors by sulpiride and sultopride in mice, 433P
- Steroidogenesis, in anaesthetized dog, failure of indomethacin to alter, 217
- Steroids, exogenous ovarian, effects of, on metabolism of β -phenylethylamine in rat lung during the oestrous cycle, 109
- , effect of, on tuberculin pleurisy in the guinea-pig, 447P
- Stomach, isolated whole, of the rat, investigation of the role of extracellular calcium in the control of acid secretion in, 123
- —, mouse isolated, analysis of anomalous pK_B values for metiamide and atropine in, 59
- , rat exteriorized, a method of illustrating changes in acid secretion and motility in, 505P
- rat, effect of a combination of aspirin and sodium salicyclate on, 484P
- rat, ulceration in, induced by indomethacin, action of salmon calcitonin on, 483P
- Stomach fundus, guinea-pig, relaxation of strips of, by adenosine, adenosine triphosphate and electrical stimulation, lack of antagonism by theophylline and ATP treatment, 293
- strips of, longitudinal muscle from, effects of purines and intramural inhibitory nerve stimulation on, effect of theophylline on, 301
- **Streptolysin O,** protective effect of some phenothiazine derivatives against, in mice, 173
- Strophanthidin, effect of, on ouabain receptor binding in dog heart, 345
- Substance P, effect of, on neurones in rat substantia nigra and nucleus accumbens, 429P
- Substantia nigra, rat, effects of peptides on, 429P
- **Sulphur hexafluoride**, effect of, on acetylcholine release from guinea-pig ileum, 229
- S-sulpho-L-cysteine, effect of, on synaptic activity in isolated hemisected spinal cords of frogs, 591
- Sulpiride, stereoselective blockade of cerebral dopamine receptors by, in the mouse, 433P
- effect of, on effects of dopamine receptor agonists and antagonists on rat nucleus accumbens, 430P
- Sultopride, stereoselective blockade of cerebral dopamine receptors by, in the mouse, 433P
- Superior cervical ganglia, calf, sodium-independent γaminobutyric acid receptor binding in, 445P
- Sympathetic function, peripheral, inhibition of, by α-monofluoromethyldopa, an irreversible inhibitor of aromatic amino acid decarboxylase in the rat, 461P
- Sympathetic nerve stimulation, effect of 5-hydroxytryptamine on contractile responses to, in dog isolated saphenous vein, 247
- effects of uptake inhibitors on responses of sheep coronary arteries to, 553

- vasoconstriction induced by, in isolated perfused kidney of the rabbit, effect of bradykinin on, in the presence of indomethacin, an inhibitor of prostaglandin synthesis, 269
- Sympathetic transmission, modulation of, by neuronally released dopamine in rabbit ear artery, 185
- Synaptic excitation, antagonism of, in the isolated spinal cord of the frog, 591
- Synaptosomes, rat hypothalamic, effect of 5-hydroxytryptamine on release of 5-HT from, 424P
- , inhibition of ATPase in, by PGE₁ may be dependent on a soluble factor, 455P
- Synaptosomal fractions, of rat brain homogenates, binding of [3H]-noradrenaline and [14C]-propranolol to, 497P
- Synaptosomal uptake mechanisms, for [3H]-5-hydroxytryptamine and [3H]-dopamine in rat brain regions, 387
- Systemic arterial pressure, effect of 7-propyl-theophyllinedopamine on, in the cat, 239

T

- **Taenia caeci,** guinea-pig, longitudinal muscle from, effects of purines and intramural inhibitory nerve stimulation on, effect of theophylline on, 301
- Taenia coli, guinea-pig isolated, relaxation of, by enantiomers of 2-azido analogues of adenosine and adenine nucleotides, 153
- Tail artery, rat, inhibitory presynaptic effects of hydralazine on noradrenergic nerve terminals of, 418P
- Tamoxifen, effect of, on the development of mouse embryos cultured over collagen, 458P
- Taurine, responses of neurones of rat cerebral cortex to, effects of diazepam and chlordiazepoxide on, 563
- Teaching, of clinical pharmacology, 501P
- **Temperature**, effect of, on inhibitory junctional transmission in smooth muscle of guinea-pig small intestine, 39
- —, effect of, on excitatory actions of acetylcholine on isolated auricles, 3
- —, effect of, on antagonist binding to cardiac β-adrenoceptors in the pig heart, 416P
- **Testosterone**, effect of, on ouabain receptor binding in dog heart, 345
- Tetrabenazine, cataleptic and monoamine-depleting effects of, in rat and mouse brain, compared with those of a butyrophenone derivative, 115
- , influence of cerebral 5-hydroxytryptamine on catalepsy induced by, in rat and mouse, 309
- Tetracyclic antidepressant drugs, presynaptic α-adrenoceptor-blocking properties among, in mouse vas deferens, 511
- Δ'-Tetrahydrocannabinol, oral activity of, in mice, and its dependence on prostaglandin E₂, 379
- 2,3,4-Tetrahydro-7,8-dihydroxy-1-phenyl-1H-3-benzazepine, effect of, on rat nucleus accumbens, 430P
- **Tetrodotoxin**, effect of, on contractile action of histamine on ileal region of isolated blood-perfused small intestine of the rat, 587
- effect of, on effects of inert gases and other general anaesthetics on acetylcholine release from guinea-pig ileum, 229

- , effect of, on effect of high pressure nitrogen and helium on acetylcholine release from guinea-pig ileum,
 221
- —, effect of, on contractile response of dog isolated saphenous vein to electrical stimulation, 247
- **Thalamus**, rat, ventromedial nucleus of, dopaminemediated circling behaviour is modulated by lesions of, 432P
- **Thallium**, effect of, on binding of agonists and antagonists to muscarinic receptors in rat brain, 371
- **Theophylline**, effect of, on spinal transmission of nociceptive information in cat, 51
- —, effect of, on postsynaptic smooth muscle effects of hydralazine in rat tail artery, 418P
- , antagonizes some effects of purines in the intestine but not those of intramural inhibitory nerve stimulation in guinea-pig and rabbit, 301
- treatment with, lack of antagonism by, of relaxation of guinea-pig fundic strip by adenosine, adenosine triphosphate and electrical stimulation, 293
- --, effect of, on release of arachidonic acid from fat cell ghosts from rabbit adipose tissue, 393
- Thiamin, deficiency of, 5-fluorouracil induced, an experimental study, 495P
- [3H]-thymidine, incorporation of, into human peripheral mononuclear cells, as measure of reactivity to phytohaemagglutinin, effects of prostaglandins E₂ and I₂ on, in presence or absence of indomethacin and eicosatetraynoic acid, 17
- **Thymoxamine**, effect of, on sedation induced by clonidine in the rat, 133
- Thyroid stimulating hormone, effect of, on ouabain receptor binding in dog heart, 345
- Thyrotrophin releasing hormone, effect of, on ouabain receptor binding in dog heart, 345
- , stimulates release of [³H]-dopamine from slices of rat nucleus accumbens in vitro, 323
- Tiapride, effect of, on effects of dopamine receptor agonists and antagonists on rat nucleus accumbens, 430P
- **Tibial nerve**, cut, effect of electrical stimulation of, on femoral blood flow in anaesthetized dog, 337
- Tolazoline, effect of, on sedation induced by clonidine in the rat, 133
- **Tolerance**, induced by morphine and ethylketocyclazocine in mouse and guinea-pig, 427P
- Trachea, rabbit, evidence for relaxation of, mediated by histamine H₂-receptors, 465P
- bovine, smooth muscle of, contracture produced in, by anticholinesterases, 464P
- , cat isolated, a useful preparation for the study of the smooth muscle relaxant action of prostaglandins, 412P
- **Tranylcypromine,** effect of, on fall in core temperature in the rat induced by amphetamine or dopamine, 605
- —, effect of pretreatment with, on the fate of intraduodenally instilled [14C]-tyramine in the cat, 454P

Trasylol see Aprotinin, 446P

- TRH, effect of, on neurones in rat substantia nigra and nucleus accumbens, 429P
- Tricyclic antidepressant drugs, presynaptic α-adrenoceptorblocking properties among, in mouse vas deferens, 511
- effects of chronic administration of, on the synthesis of monoamines in rat brain, 435P

- effects of, on specific binding of [³H]-imipramine in rat brain, 434P
- ααα-Trifluoro-2-methyl-4-nitro-m-lactotoludide, effect of, on ouabain receptor binding in dog heart, 345
- **Triflupromazine**, effect of, on 5-hydroxytryptamine receptors in the hindquarters of the rat, 79
- Triglycerides, [14C]-arachidonic acid taken up into, in fat cell ghosts from rabbit adipose tissue, effect of adrenocorticotrophic hormone on, 393
- True/false units, of assessment in physiology and pharmacology, 503P
- Tryptamine, urinary, sensitive gas chromatographic technique for quantification of, 469P
- Tryptophan, effect of, on catalepsy induced by tetrabenazine and butyrophenone in the rat and mouse, 309
- Tuberculin pleurisy, in the guinea-pig, effects of some antirheumatic agents on, 447P
- **Tubocurarine**, effect of, on excitatory actions of acetylcholine on perfused rabbit heart, 3
- Twitch potentiation, in rat isolated nerve-diaphragm preparation, effect of diothiothreitol on, induced by anticholinesterase, 481P
- Twitch response, of mouse vas deferens to electrical stimulation, effects of tri- and tetracyclic antidepressant drugs on, 511
- **Tyramine**, effect of, on heart rate and coronary sinus catecholamine concentration during cardioaccelerator nerve stimulation in spinal dogs, 283
- [14C]-tyramine, intraduodenally instilled, effects of pretreatment with monoamine oxidase inhibitor on the fate of, in the cat, 454P

U

- U0521, effect of, on responses of sheep coronary arteries to catecholamines and sympathetic nerve stimulation,
- U-32,802A, a butyrophenone derivative, production of catalepsy and depletion of brain monoamines by, in rat and mouse, 115
- a butyrophenone, influence of cerebral 5-hydroxytryptamine on catalepsy induced by, in rat and mouse, 309
- Ulceration, histological evidence for, in the rat following indomethacin treatment, correlation between rise in acute phase proteins and, 450P
- —, gastric, indomethacin-induced, action of salmon calcitonin on, 483P
- Ulcerogenic properties, and anti-inflammatory properties, of indomethacin, influence of fasting and cimetidine on the relationship between, in rat, 33
- Urethane, protective effect of, against streptolysin O in mice, 173
- —, inhibition by, and pentobarbitone, of the in vitro response of the adenohypophysis to luteinising hormone-releasing hormone in male rats, 277
- , and contraction of vascular smooth muscle of rat aortic strips and portal vein segments, 255
- , effect of, on acetylcholine release from guinea-pig ileum, 229

- Urinary excretion, of aldosterone and electrolytes during amiloride administration to congestive heart failure patients, time-related changes in, 494P
- , of magnesium during amiloride administration in saline-loaded rats, 493P
- Urine, sensitive gas chromatographic technique for quantification of tryptamine in, 469P
- Uterus, isolated rat, β -adrenoceptor agonist activity of labetalol on, 13
- —, rat isolated, effects of catecholamines on, 466P
- rat, biological activity of hydroxy analogues of oxytocin and of lysine-vasopressin in, 575
- mouse, depolarized calcium-free, effect of cortisol on response of, to calcium, 490P
- rat, homogenates of rat placenta contain a factor(s) which inhibits arachidonic acid metabolism in, 482P

V

- Vagus nerve, stimulation of, effect of, on excitatory actions of acetylcholine on heart, 3
- **Valproate**, sodium, effect of, *in vivo* in the mouse, on metabolism on γ-aminobutyric acid, 441P
- Vas deferens, rat, further sub-classification of α -adrenoceptors in, 421P
- field stimulated mouse, baclofen as a selective agonist for a novel type of γ-aminobutyric acid receptor in, 444P
- —, mouse, presynaptic α-adrenoceptor-blocking properties among tri- and tetracyclic antidepressant drugs in, 511
- rat, prejunctional adenosine-clonidine interactions in, 492P
- Vascular smooth muscle, in vivo evidence for two distinct types of postsynaptic α-adrenoceptor in, in anaesthetized cats and pithed rats, 207
- , of rat aortic strips and portal vein segments, effect of urethane on. 255
- Vasoconstriction, adrenergically induced, attenuation by bradykinin of, in the isolated perfused kidney of the rabbit, relationship to prostaglandin synthesis, 269
- Vasodepressor responses, antagonism of, to histamine by ranitidine and cimetidine in the anaesthetized dog, 414P
- Vasodilator innervation, dopaminergic, in canine paw pad, evidence for, 337
- Vasopressin, lysine-, hydroxy analogues of, biological activity of, in rat uterus, mammary strip and mammary gland, 575
- , lys- and arg-, effect of, on ouabain receptor binding in dog heart, 345
- Venom, of the green mamba, *Dendroaspis angusticeps*, effect of, on skeletal muscle and neurotransmission in rat, mouse and chick, 199
- Ventricle, left, cardiac receptors in, effect of sodium cromoglycate on, in the anaesthetized dog, 569
- Ventricular muscle, canine, electrophysiological actions of mexiletine (Kö1173) on, 143
- Ventromedial nucleus, of rat thalamus, dopamine-mediated circling behaviour is modulated by lesions of, 432P

- Verapamil, effects of, and calcium ion withdrawal, on excitation-contraction coupling in rabbit pulmonary vascular smooth muscle, 467P
- effect of, on the mechanical performance of the rabbit myocardium perfused with an oxygenated and a hypoxic medium, 485P

Videograph recording system, laboratory demonstration of drug responses using, 504P

- Vitamin C, hypocholesterolemic effects of, in male guineapigs, 456P
- deficiency and supplementation, effect of, on weight pattern and skin potential of the guinea-pig, 457P
- -, diagnosis and treatment of Hay Fever with, 494P
- in the plasma and in the leukocytes of Italians in different periods of the year, 495P

W

Waking time, in the rat, effects of catecholamine agonists on, 87

- WB 4093, a selective presynaptic α₂-adrenoceptor antagonist?, 487P
- Weight pattern, of the guinea-pig, effect of vitamin C deficiency and supplementation on, 457P

X

- Xylazine, effect of, on blood pressure, heart rate and tension of anococcygeus muscle of the rat, 421P
- , effect of, on sedation induced by clonidine in the rat, 133

Y

- Yohimbine, effect of, on pressor responses to phenylephrine and noradrenaline in anaesthetized cats and pithed rats, 207
- —, effect of, on sedation induced by clonidine in the rat,

AUTHOR INDEX

A

- ABBS, E.T. & DUTTA, C.F. Oxymetazoline-sensitive and -insensitive presynaptic α-adrenoceptors in isolated rat atria 419P
- AHERN, C.P., McLOUGHLIN, J.V., WHEATLEY, A.M. & WILSON, P. (introduced by WILSON, C.W.M.) Althesin as an anaesthetic in experimental animals susceptible to halothane-initiated malignant hyperthermia, 425P
- AKSOY, M., BASU, T.K. & DICKERSON, J.W.T. (introduced by WILSON, C.W.M.) 5-Fluorouracil-induced thiamin deficiency—an experimental study, 495P
- AL-HABOUBI, H.A. & ZEITLIN, I.J. The actions of cimetidine, mepyramine, indomethacin and aprotinin (Trasylol) in the inflammatory response in adjuvant rats, 446P
- ALDRIDGE, S., GLITHERO, P., HULL, SIAN, JARMANN, CHRISTINE, JOHNSON, G. & MARSDEN, C.A. Behavioural scoring—how good is the agreement between scores?, 477P
- ALTURA, BURTON M. & WEINBERG, JULIO. Urethane and contraction of vascular smooth muscle, 255
- ANGUS, J.A. & BLACK, J.W. Analysis of anomalous pK_B values for metiamide and atropine in the isolated stomach of the mouse, 59
- APPERLEY, G.H., COLEMAN, R.A., KENNEDY, I. & LEVY, G.P. The cat isolated trachea, a useful preparation for the study of the smooth muscle relaxant action of prostaglandins, 412P
- ARITA, MAKOTO, GOTO, MASAYOSI, NAGAMOTO, YASUO & SAIKAWA, TETSUNORI Electrophysiological actions of mexiletine (Kö 1173) on canine Purkinje fibres and ventricular muscle, 143
- Assumpcao, J.A., Bernardi, N., Brown, J. & Stone, T.W. Selective antagonism by benzodiazepines of neuronal responses to excitatory amino acids in the cerebral cortex, 563
- ATKINSON, P. & JACKSON, J. (introduced by BOWMAN, W.C.) Influence of betamethasone on concentrations of digoxin in rat serum, liver and heart, 491P

P

- BAER, HANS P. & FREW, ROBERT Relaxation of guinea-pig fundic strip by adenosine, adenosine triphosphate and electrical stimulation: lack of antagonism by theophylline or ATP treatment, 293
- Baker, G.B., Calverley, D.G., Dewhurst, W.G. & Martin, I.L. Sensitive gas chromatographic technique for quantification of urinary tryptamine, 469P
- Bakhle, Y.S. & Ben-Harari, R.R. Effects of the oestrous cycle and exogenous ovarian steroids on metabolism of β-phenylethylamine in rat lung, 109
- Balfour, D., Hewick, D. & Murray, N. Comparison of plasma, erythrocyte and brain lithium concentrations in the guinea-pig and rat, 474P

- Barlow, J.J., Main, B.G., Moors, J.A., Nuttall, A. & Snow, H.M. (introduced by Conway, J.) The cardio-vascular activity of ICI 118,587, a novel β-adrenoceptor partial antagonist, 412P
- BARRETT, J.C. & HARVEY, A.L. Effects of the venom of the green mamba, *Dendroaspis angusticeps*, on skeletal muscle and neuromuscular transmission, 199
- BASU, T.K. see AKSOY, M., 495P
- BATES, R.F.L., BUCKLEY, G.A. & STRETTLE, R.J. The action of salmon calcitonin on indomethacin-induced gastric ulceration in the rat, 483P
- Bell, Christopher & Lang, William J. Evidence for dopaminergic vasodilater innervation of the canine paw pad, 337
- BEN-HARARI, R.R. see BAKHLE, Y.S., 109
- Bennett, T., Marsden C.D., Short, A.H. & Tomlinson, D.R. True/false units of assessment in physiology and pharmacology, 503P
- BERNARDI, N. see ASSUMPCAO, J.A., 563
- Besluau, D., Gauthier-Rahman, S. & Halpern, B. The protective effect of some phenothiazine derivatives against streptolysin O, 173
- Bevan, P., Bradshaw, C.M., Pun, R.Y.K., Slater, N.T. & Szabadi, E. The relative contribution of iontophoresis and electro-osmosis to electrophoretic release of noradrenaline from multibarrelled micropipettes, 478P
- BIGON, E., BOARATO, E., BRUNI, A., LEON, A. & TOFFANO, G. Pharmacological effects of phosphatidylserine liposomes: the role of lysophosphatidylserine, 611
- BILLINGHAM, M.E.J. & TUCKER, MARY J. Correlation between the rise in acute phase proteins and histological evidence of ulceration in the rat following indomethacin treatment, 450P
- BIRDSALL, N.J.M., BURGEN, A.S.V., HULME, E.C. & WELLS, J.W. Effects of ions on the binding of agonists and antagonists to muscarinic receptors, 371
- BISSET, G.W., CHOWDREY, H.S., HOPE, B.B., NILWISES, N. & WALTI, M. Hydroxy analogues of oxytocin and of lysine-vasopressin, 575
- BLACK, J.W. see Angus, J.A., 59
- BLACKBURN, T.P., FOSTER, G.A., HEAPY, C.G. & KEMP, J.D. (introduced by Greenwood, D.T.) Differential rotational behaviour after unilateral 5,7-dihydroxy-tryptamine induced lesions of the dorsal raphe nucleus, 431P
- BLACKHAM, A. & WOODS, AUDREY M. The effect of some antirheumatic agents on tuberculin pleurisy in the guinea-pig, 447P
- Blundell, J.E. & McArthur, R.A. Investigation of food consumption using a dietary self-selection procedure: Effects of pharmacological manipulation and feeding schedules, 436P
- BOAKES, R.J., BRADLEY, P.B. & CANDY, J.M. Interactions of (+)-amphetamine and chlorpromazine on neurones in the lower brain stem of the rat, 165
- BOARATO, E. see BIGON, E., 611

- BORKHATARIA, B., HEMSWORTH, B.A., SHREEVE, S.M. & VEITCH, G.B.A. The pharmacological activity of some choline analogues and their acetylated derivatives, 486P
- BORYS, HENRY K., INGALL, GLYNNIS B. & KARLER, RALPH Development of tolerance to the prolongation of hexobarbitone sleeping time caused by cannabidiol, 93
- BOTTING, REGINA M. & TUFFERY, A.A. Audio-visual teaching material used on courses for new Home Office licencees, 504P
- BOWERY, N.G., DOBLE, A., HILL, D.R., HUDSON, A.L., SHAW, J.S. & TURNBULL, M.J. Baclofen: a selective agonist for a novel type of GABA receptor, 444P
- Bowery, N.G., Hill, D.R. & Mohler, H. Sodium-independent GABA receptor binding in peripheral nervous tissue, 445P
- BOUDOT, J.P. & CAVERO, I. Effects of diltiazem and verapamil on the mechanical performance of the rabbit myocardium perfused with an oxygenated and an hypoxic medium, 485P
- BOWMAN, ANN, GILLESPIE, J.S. & MARTIN, W. The inhibitory material in extracts from the bovine retractor penis muscle is not an adenine nucleotide, 327
- BOWMAN, W.C. see ATKINSON, P., 491P
- BOYLE, F.C. see DIGGES, K.G., 466P
- Bradley, J.R., Fayle, R.J.S., Harmsworth, N.J., Kayani, J.A., Lockett, W.I., Montgomery, S.C., Short, A.H., Trimble, I.M.G. & Wilson, C.G. Student-constructed hydraulic and mechanical models for learning fundamentals of pharmacokinetics, 510P
- Bradley, P. B. see Boakes, R.J., 165
- Bradshaw, C.M. see Bevan, P., 478P
- Bradshaw, D., GIROUD, J.P. & ROCH-ARVEILLER, M. The effect of dibutyryl cyclic AMP on the chemotaxis and chemokinesis of rat polmorphonuclear leucocytes, 472P
- Briley, M., Langer, S.Z. & Raisman, Rita Specific [3H]-imipramine binding in rat brain, 434P
- Brine, F., Cornish, E.J. & Miller, R.C. Effects of uptake inhibitors on responses of sheep coronary arteries to catecholamines and sympathetic nerve stimulation, 553 Brown, J. see Assumpcao, J.A., 563
- Brown, M.J., Davies, D.S. & Dollery, C.T. Quantitative analysis of noradrenaline clearance, 452P
- Brown, R.A., Brown, R.C., O'Connor, S.E. & Solca, Anne M. Pre- and post-synaptic activities of some dopamine analogues and related compounds, 421P
- Brown, R.C. see Brown, R.A., 421P
- Bruni, A. see Bigon, E. 611
- BUCKLEY, G.A. see BATES, R.F.L., 483P
- BUNCE, K.T., HONEY, A.C. & PARSONS, M.E. Investigation of the role of extracellular calcium in the control of acid secretion in the isolated whole stomach of the rat, 123
- BURGEN, A.S.V. see BIRDSALL, N.J.M., 371
- Burn, J.H. Excitatory actions of acetylcholine in the heart, 3
- BUTCHERS, P.R., FULLARTON, J.R., SKIDMORE, I.F., THOMP-SON, L.E., VARDEY, C.J. & WHEELDON, A. A comparison of the anti-anaphylactic activities of salbutamol and disodium cromoglycate in the rat, the rat mast cell and in human lung tissue, 23
- BYRNE, A.J., HEALY, T.E.J. & TOMLINSON, D.R. The effects of ketamine on noradrenergic transmission and the response to noradrenaline in rat smooth muscle, 462P

- C
- CALLANAN, K. & KEENAN, A.K. Prejunctional clonidineadendosine interactions in rat vas deferens, 492P
- CALVERLEY, D.G. see BAKER, G.B., 469P
- CANDY, J.M. see BOAKES, R.J., 165
- CANNON, P.J. see DUNNE, A., 491P
- CANNON, P.J., GILNA, P. & O'CONNELL, C. A method of illustrating changes in acid secretion and motility in rat exteriorized stomach, 505P
- CANNON, P.J., MONKS, R. & MURPHY, P. Transduceradapted Benedict Roth Spirometer for small animals, 506P
- CANNON, P.J., MULVIHILL, T.P. & MURPHY, P. Further electronic evolution of the Palmer Kymograph, 506P
- CANNON, P.J. & O'CONNELL, C. Autonomic outflow stimulation at different spinal cord levels and the resulting cardiovascular, gut and bladder responses in the frog 504P
- CAREY, BERNADETTE & WHALLEY, E.T. β-Adrenoceptor agonist activity of labetalol on the isolated uterus of the rat. 13
- CARTER, D.A. & DYER, R.G. Inhibition by pentobarbitone and urethane of the *in vitro* response of the adenohypophysis to luteinising hormone-releasing hormone in male rats, 277
- CAVERO, I., DENNIS, T., LEFEVRE-BORG, FRANCOISE, PERROT, P., ROACH, A.G. & SCATTON, B. Effects of clonidine, prazosin and phentolamine on heart rate and coronary sinus catecholamine concentration during cardioaccelerator nerve stimulation in spinal dogs, 283
- CAVERO, I. see BOUDOT, J.P. 485P
- CERRITO, F. & RAITERI, M. Evidence for an autoreceptormediated presynaptic control of 5-hydroxytryptamine release in central nerve endings, 424P
- CHAMBERS, P.L. & ROWAN, M.J. Demonstration of central synaptic effects of chemicals in the American cockroach, 495P
- CHAN, CHI-CHUNG & KALSNER, STANLEY An examination of the negative feedback function of presynaptic adrenoceptors in a vascular tissue, 401
- CHAND, N. & EYRE, P. Coronary anaphylaxis in vitro, 193 CHEVILLARD, C., DA PONTE, FRANCESCA, MATHIEU, MARIE-NOELLE, SAIAG, B. & WORCEL, M. Inhibitory presynaptic effects of hydralazine on noradrenergic nerve terminals of the rat tail artery, 418P
- CHOW, EDWIN, KIM, RYUNG-SOON SONG, LABELLA, FRANK S. & QUEEN, GARY Ouabain receptor binding of hydroxyprogesterone derivatives, 345
- CHOWDREY, H.S. see BISSET, G.W., 575
- CLARK, AMANDA L., HOBBIGER, F. & TERRAR, D.A. The effect of dithiothreitol on anticholinesterase induced antidromic firing and twitch potentiation, 481P
- CLOW, A., JENNER, P., MARSDEN, C.D., REAVILL, C. & THEODOROU, A. Stereoselective blockade of cerebral dopamine receptors by sulpiride and sultopiride, 433P
- COCKBILL, S.R., HEPTINSTALL, S. & TAYLOR, PATRICIA M. A comparison of the abilities of acetysalicyclic acid, flurbiprofen and indomethacin to inhibit the release reaction and prostaglandin synthesis in human blood platelets, 73
- COLEMAN, R.A. see APPERLEY, G.H., 412P
- COLLIS, M.G. & SHEPHERD, J.T. Effect of amitryptyline on presynaptic receptors in the dog saphenous vein, 422P

- CONWAY, J. see BARLOW, J.J., 412P
- COOPER, MARIE & WYLLIE, JOHN H. Some properties of 5-hydroxytryptamine receptors in the hindquarters of the rat. 79
- CORNISH, E.J. see BRINE, F., 553
- COSTALL, B., HUI, S-C.G. & NAYLOR, R.J. Demonstration of the ability of apomorphine to act on dopamine receptors on nerve terminals in the nucleus accumbens to reduce locomotor hyperactivity, 475P
- COUNIHAN, T.B., DUNNE, A., RYAN, M.F. & RYAN, M.P. Time-related changes in urinary aldosterone and electrolyte excretion during amiloride administration to congestive heart failure patients, 494P
- Cox, B. & Lee, T.F. Evidence for an endogenous dopamine-mediated hypothermia in the rat, 605
- CROOKS, JANE R. & MARTIN, G.R. An isolated vascular tissue preparation showing a specific relaxant effect of dopamine, 474P
- CUSACK, N.J. & PLANKER, M. Relaxation of isolated taenia coli of guinea-pig by enantiomers of 2-azido analogues of adenosine and adenine nucleotides, 153

D

DA PONTE, FRANCESCA see CHEVILLARD, C., 418P

DALY, M.J., HUMPHRAY, J.M. & STABLES, R. Antagonism of vasodepressor and gastric secretory responses to histamine by ranitidine and cimetidine in the anaesthetized dog, 414P

DAVIES, D.S. see Brown, M.J., 452P

DEL SOLDATO, P., MELI, A. & VOLTERRA, G. Influence of fasting and cimetidine on the relationship between ulcerogenic and anti-inflammatory properties of indomethacin, 33

DELLA CORTE, LAURA, GREMIGNI, D., MEGAZZINI, IRENE, MOBILIO, RENATA & SGARAGLI, G.P. Chlorimipramineinduced phospholipidosis: biochemical and pharmacokinetic observations, 449P

DENNIS, T. see CAVERO, I., 283

DEVANE, J. & RYAN, M.P. Urinary magnesium excretion during amiloride administration in saline loaded rats, 493P

DEWHURST, W.G. see BAKER, D.G., 469P

DICKERSON, J.W.T. see AKSOY, M., 495P

DICKINSON, K. & NAHORSKI, S.R. Homogeneity of β -adrenoceptors on rat erythrocytes, 479P

DIGGES, K.G. & BOYLE, F.C. The effects of catecholamines on the rat isolated uterus, 466P

DIXON, M., JACKSON, D.M. & RICHARDS, I.M. The effects of sodium cromoglycate on lung irritant receptors and left ventricular cardiac receptors in the anaesthetized dog, 569

Doble, A. see Bowery, N.G., 444P

DOCHERTY, J.R., MACDONALD, A. & McGrath, J.C. Further sub-classification of α-adrenoceptors in the cardiovascular system, vas deferens and anococcygeus of the rat, 421P

Doggett, N.S. & Moore, N.A. Antagonism of apomorphine and lergotrile hypothermia, 434P

DOLLERY, C.T. see Brown, M.J., 452P

Drew, G.M. Is WB 4093 a selective presynaptic α_2 -adrenoceptor antagonist?, 487P

- Drew, G.M., Gower, Alma J. & Marrott, A.S. α_2 -Adrenoceptors mediate clonidine-induced sedation in the rat, 133
- Drew, G.M. & Whiting, Susan B. Evidence for two distinct types of postsynaptic α-adrenoceptor in vascular smooth muscle *in vivo*, 207
- Dubocovich, Margarita L., Langer, S.Z. & Pelayo, F. Cocaine and desipramine antagonize the clonidine-induced inhibition of [³H]-noradrenaline release from the rat cerebral cortex, 417P
- Duggan, A.W. & Griersmith, B.T. Methylxanthines, adenosine 3',5'-cyclic monophosphate and the spinal transmission of nociceptive information, 51
- DUNNE, A. (introduced by CANNON, P.J.) Comparison of individual and cumulative dose-response curves, 491P

DUTTA, C.F. see ABBS, E.T., 419P

Dyer, R.G. see Carter, D.A., 277

E

ELLIOTT, P.N.C. The effect of combination of aspirin and sodium salicyclate on the rat stomach, 484P

EVANS, R.H., FRANCIS, A.A., HUNT, K., OAKES, D.J. & WATKINS, J.C. Antagonism of excitatory amino acid-induced responses and of synaptic excitation in the isolated spinal cord of the frog. 591

EYRE, P. see CNAND, N., 193

F

Fairbairn, J.W. & Pickens, Joan T. The oral activity of Δ '-tetrahydrocannabinol and its dependence on prostaglandin E_2 , 379

FARJO, I.B. & McQUEEN, JUDITH K. Dopamine agonists and cobalt-induced epilepsy in the rat, 353

FARSANG, CSABA & KUNOS, GEORGE. Naloxone reverses the antihypertensive effect of clonidine, 161

FAYLE, R.J.S. see BRADLEY, J.R., 501P

FENIUK, W., HUMPHREY, P.P.A. & WATTS, A.D. Preliminary characterization of the presynaptic receptors for 5-hydroxytryptamine in dog isolated saphenous vein, 423P

FENIUK, W., HUMPHREY, P.P.A. & WATTS, A.D. Presynaptic inhibitory action of 5-hydroxytryptamine in dog isolated saphenous vein, 247

FIDANZA, A., MARYINOLIL. & MASTROIACOVO. P. (introduced by WILSON, C.W.M.) Vitamin C in the plasma and in the leukocytes of Italians in different periods of the year, 495P

Foldes, A. & Hall, R.C. The effects of histamine on responses of the rabbit ear artery to electrical stimulation and to exogenous noradrenaline, 329

FOSTER, G.A. see BLACKBURN, T.P., 431P

Foy, J.M. Diuretic testing, 503P

FOZARD, J.R., PALFREYMAN, M.G., SPEDDING, M., WAGNER, J. & WOODWARD, J.K. Inhibition of peripheral sympathetic function by α-monofluoromethyldopa, an irreversible inhibitor of aromatic amino acid decarboxylase. 461P

FRANCIS, A.A. see EVANS, R.H., 591

FREEDMAN, S.B., WAIT, CHRISTINE P. & WOODRUFF, G.N. Effects of dopamine receptor agonists and antagonists in the rat nucleus accumbens, 430P

FREW, ROBERT see BAER, HANS P., 293

FUENMAYOR, LUIS & VOGT, MARTHE The influence of cerebral 5-hydroxytryptamine on catalepsy induced by brain amine depleting neuroleptics or by cholinomi-

FUENMAYOR, LUIS D. & VOGT, MARTHE Production of catalepsy and depletion of brain monoamines by a butyrophenone derivative, 115

FULLARTON, J.R. see BUTCHERS, P. R., 23

FURMAN, B.L. see GHAFFAR, A.A.R.A., 490P

FURMAN, B. L. & WILSON, G. ANN Does the hypoglycaemic effect of 5-hydroxytryptophan involve insulin?, 488P

G

GARCHA, G., IMRIE, P.R., MARLEY, E. & THOMAS, D.V. Effects of monoamine oxidase inhibitor pretreatment on the fate of intraduodenally instilled [14C]-tyramine, 454P

GAUTHIER-RAHMAN, S. see BESLUAU, D., 173

GERBER, JOHN G. & NIES, ALAN S. The failure of indomethacin to alter ACTH-induced adrenal hyperaemia or steroidogenesis in the anaesthetized dog, 217

GHAFFAR, A.A.R.A. & JACKSON, J. (introduced by FURMAN, B.L.) The effect of cortisol on the response of the depolarized, calcium-free mouse uterus to calcium, 490P

GILBERT, J.C. & WYLLIE, M.G. Inhibition of synaptosome ATPase by PGE₁ may be dependent on a soluble factor, 455P

GILLESPIE, J.S. see BOWMAN, ANN, 327

GILNA, P. see CANNON, P.J., 505P

GIROUD, J.P. see BRADSHAW, D., 472P

GLITHERO, P. see ALDRIDGE, S 477P

GORDON, D., HENDERSON, D. WESTWICK, J. Effects of prostaglandins E2 and I2 on 1. man lymphocyte transformation in the presence and absence of inhibitors of prostaglandin biosynthesis, 17

GOWER, ALMA J. see DREW, G.M., 133

GRAHAME-SMITH, D.G. see STEINER, J.A., 489P

Granger, D.N., RICHARDSON, P.D.I. & TAYLOR, A.E. The effects of isoprenaline and bradykinin on capillary filtration in the cat small intestine, 361

GREENWOOD, D.T. see BLACKBURN, T.P., 431P GREMIGNI, D. see DELLA CORTE, LAURA, 449P GRIERSMITH, B.T. see DUGGAN, A.W., 51

HALL, R.C. see Foldes, A., 329

HALLIDAY, D.J.X., LITTLE, HILARY J. & PATON, W.D.M. The effects of inert gases and other general anaesthetics on the release of acetylcholine from the guinea-pig ileum, 229

HALPERN, B. see BESLUAU, D., 173

HARDY, J.G., KELLAWAY. I.W., ROGERS, J. & WILSON, C.G. Distribution and fate in the rabbit of liposomes containing [131]-sodium iodide, 459P

HARMSWORTH, N.J. see BRADLEY, J.R., 501P

HARPER, BARBARA & HUGHES, I.E. Presynaptic α-adrenoceptor-blocking properties among tri- and tetracyclic antidepressant drugs, 511

HARROWING, P.D. & WILLIAMS, K.I. Homogenates of rat placenta contain a factor(s) which inhibits uterine arachidonic acid metabolism, 482P

HARVEY, A.L. see BARRETT, J.G., 199

HEALY, T.E.J. see BYRNE, A.J., 462P

HEAPY, C.G. see BLACKBURN, T.P., 431P

HEMSWORTH, B.A. see BORKHATARIA, B., 486P

HEMSWORTH, B.A., SHREEVE, S.M. & VEITCH, G.B.A. The neuromuscular blocking action of some cyclic analogues of choline, 498P

HEMSWORTH, B.A. & STREET, J.A. Binding of [3H]-noradrenaline and [14C]-propranolol to synaptosomal fractions of rat brain homogenates, 497P

HENDERSON, D.C. see GORDON, D., 17

HEPTINSTALL, S. see COCKBILL, S.R., 73

HEWICK, D. see BALFOUR, D., 474P

HEYWOOD, J. (introduced by WILSON, C.W.M.) The implications of microprocessors for the curriculum in pharmacology, 504P

HILL, D.R. see BOWERY, N.G., 444P

HILL, D.R. see BOWERY, N.G., 445P

HOBBIGER, F. see CLARK, AMANDA L., 481P

HONEY, A.C. see BUNCE, K.T., 123

HOPE, B.B. see BISSET, G.W., 575

HOPE, W., MAJEWSKI, H., McCullouch, M.W., RAND, M.J. & STORY, D.F. Modulation of sympathetic transmission by neuronally released dopamine, 185

HOWE, S.J., McCarthy, P.S. & Metcalf, G. Assessment of physical dependence in rats after continuous intraperitoneal infusion of morphine or ketocyclazocine. 427P

HUDSON, A.L. see BOWERY, N.G., 444P

HUGHES, I.E. see HARPER, BARBARA, 511

Hui, S-C, G. see Costall, B., 475P

HULL, SIAN see ALDRIDGE, S., 477P

HULME, E.C. see BIRDSALL, N.J.M., 371

HUMPHRAY, J.M. see DALY, M.J., 414P HUMPHREY, P.P.A. see FENIUK, W., 247

HUMPHREY, P.P.A. see FENIUK, W., 423P

HUNT, K. see Evans, R.H., 591

I

IMMS, F.J., NEAME, R.L.B. & POWIS, D.A. The subdivision of β -adrenoceptors in the cardiovascular system of the rat, 367

IMRIE, P.R. see GARCHIA, G., 454P

INGALL, GLYNNIS B. see BORYS, HENRY K., 93

IOANNIDES, C., OKINE, L. & PARKE, D.V. Effects of β -adrenoceptor antagonists on the hepatic mixed-function oxygenases in the rat, 451P

IRVING, G. Effects of autonomic drugs in mice, 504P

J

Jackson, D.M. see Dixon, M., 569 JACKSON, J. see ATKINSON, P., 491P JACKSON, J. see GHAFFAR, A.A.R.A., 490P JACKSON, J. (introduced by WATON, N.G.) Modulation of spontaneous and acetylcholine-induced contractions of rat ileum by betamethasone, 448P

JAMISON, J.P. & McKINLEY, R.K. (introduced by RODDIE, I.C.) Evidence for histamine H2-receptor mediated relaxation of rabbit trachea, 465P

JARMANN, CHRISTINE see ALDRIDGE, S., 477P

JENNER, P. see CLOW, A., 433P

JENNER, P., LEIGH, N., MARSDEN, C.D. & REAVILL, C. Dopamine-mediated circling behaviour is modulated by lesions of the ventromedial nucleus of the thalamus, 432P

JENNER, P., MARSDEN, C.D., PRATT, J. & REYNOLDS, E.H. Modulation of picrotoxin-induced forepaw myoclonus in the rat by benzodiazepines, 440P

JOHNSON, F. & WILSON, C.G. A microprocessor-based simulator for teaching pharmacokinetics, 502P

JOHNSON, G. see ALDRIDGE, S., 477P

JOOST, H.G. Inhibition of insulin secretion from the perfused pancreas of the rat by pizotifen, 265

JOSE, P.J. & SEALE, J.P. Incorporation and metabolism of [14C]-arachidonic acid in guinea-pig lungs, 519

JUNG, M.J., PALFREYMAN, M.G., RIBEREAU-GAYON, G. WAGNER, J. & ZRAIKA, MONIQUE Monoamine-depleting properties of a new and very potent enzyme-activated irreversible inhibitor or aromatic amino acid decarboxylase: a-monofluoromethyldopa, 460P

KALSNER, STANLEY see CHAN, CHI-CHUNG, 401 KARLER, RALPH see BORYS, HENRY K., 93 KAYANI, J.A. see Bradley, J.R., 501P KAZDA, S. see TOWART, R., 409P KEENAN, A.K. see Callanan, K., 492P KELLAWAY, I.W. see HARDY, J.G., 459P KEMP, J.D. see BLACKBURN, T.P., 431P KENNEDY, I. see APPERLEY, G.H., 412P

KERWIN, R.W. & PYCOCK, C.J. Thyrotrophin releasing hormone stimulates release of [3H]-dopamine from slices of rat nucleus accumbens in vitro, 323P

Kim, Ryung-Soon Song see Chow, Edwin, 345

KIRKPATRICK, C.T. & ROONEY, P.J. (introduced by SCHOL-FIELD, C.N.) The contracture produced in tracheal smooth muscle by anticholinesterases, 464P

KIRKPATRICK, C.T. (introduced by Scholfield, C.N.) A microcomputer-based signal acquisition system suitable for use in the pharmacological and physiological laboratory, 497P

KIRKSEY, D.F. & SLOTKIN, T.A. Concomitant development of [3H]-dopamine and [3H]-5-hydroxytryptamine uptake systems in rat brain regions, 387

Kunos, George see Farsang, Csaba, 161

LABELLA, FRANK S. see CHOW, EDWIN, 345 LAHAN, G.D., OSUIDE, G. & STANSFIELD, F. Anticonvulsant paoperties of ethyl-N-phthalimidoxy acetate, 441P LANG, RICHARD J. Effects of calcium and magnesium ions, temperature and repetitive stimulation on inhibitory

junctional transmission in smooth muscle of guinea-pig small intestine, 39

LANG, WILLIAM J. see BELL, CHRISTOPHER, 337

LANGER, S.Z. see Briley, M., 434P

LANGER, S.Z. see DUBOCOVICH, L., 417P

LAWRENCE, D. & LIVINGSTON, A. Effect of physostigmine and neostigmine on ketamine anaesthesia and analge-

LEACH, G.D.H. Laboratory demonstration of drug responses using the videograph recording system, 504P

LECY, G.P. see APPERLEY, G.H., 412P

LEE, T.F. see Cox, B., 605

Lefevre-Borg, Francoise see Cavero, I., 283

LEIGH, N. see JENNER, P., 432P

LEON, A. see BIGON, E., 611

LEONARD, B.E. & MORINAN, A. Neurochemical effects of fluphenazine decanoate in a socially reared and isolated young rats, 439P

LEWIS, A. & WILSON, C.W.M. The effect of vitamin C deficiency and supplementation on the weight pattern and skin potential of the guinea-pig, 457P

LEWIS, G.P., PIPER, PRISCILLA J. & VIGO, CARMEN The effects of glucocorticosteroids on the distribution of arachidonic acid in fat cell ghosts, 393

LITTLE, HILARY J. see HALLIDAY, D.J.X., 229

LITTLE, HILARY J. & PATON, W.D.M. The effects of high pressure helium and nitrogen on the release of acetylcholine from the guinea-pig ileum, 221

LIVINGSTON, A. see LAWRENCE, D., 426P

LIVINGSTON, A. & VERGARA, G.A. Effect of halothane on microtubule numbers in unmyelinated axons from rat sciatic nerve, 473P

LLOYD, K.G., WILLIGENS, M.T. & WORMS, P. Biphasic effect on direct GABA mimetic drugs on haloperidolinduced catalepsy, 442P

LOCKETT, W. I. see BRADLEY, J.R., 501P

LOVETT, G.S., SWEETMAN, A.J. & SWEETMAN, D.F. Comparison of effects of 2-2'-pyridylisatogen, 2-phenylisatogen and papaverine on calcium-stimulated respiration in mitochondria isolated from guinea-pig liver, 480P

M

McArthur, R.A. see Blundell, J.E., 436P

McCaig, Dorothy & Parratt, J.R. The cardiovascular pharmacology of 7-propyltheophylline-dopamine (D4975); comparison with dopamine and dobutamine,

McCarthy, P.S. see Howe, S.J., 427P

McCullouch, M.W. see Hope, W., 185

McCullouch, M.W., Medgett, I.C. & Rand, M.J. Effects of the histamine H2-receptor blocking drugs burimamide and cimetidine on noradrenergic transmission in the isolated aorta of the rabbit and atria of the guineapig, 535

MACDONALD, A. see DOCHERTY, J.R., 421P

McGrath, J.C. see Docherty, J.R., 421P

McKinley, R.K. see Jamison, J.P., 465P

MACLAGAN, JENNIFER & NEY, URSULA M. Inhibition of propranolol-induced bronchospasm by sodium cromoglycate, 488P

McLoughlin, J.V. see Ahern, C.P., 425P

McQueen, Judith K. see Farjo, I.B., 353

Main, B.G. see Barlow, J.J., 412P

MAJEWSKI, H. see HOPE, W., 185

MALIK, K.U. & NASILETTI, A. Attenuation by bradykinin of adrenergically induced vasoconstriction in the isolated perfused kidney of the rabbit: relationship to prostaglandin synthesis, 269

MANTEGAZZA, PAOLO, TAMMISO, REMIGIO, VICENTINI, LUCIA, ZAMBOTTI, FERNANDA & ZONTA, NERINA Muscimol antagonism of morphine analgesia in rats, 103

MARLEY, E. see GARCHIA, G., 454P

MARRIOTT, A.S. see DREW, G.M., 133

Marsden, C.A. see Aldridge, S., 477P

Marsden, C.D. Evidence for the release of hippocampal 5-hydroxytryptamine by α-methyltryptamine, 438P

MARSDEN, C.D. see BENNETT, A., 503P

MARSDEN, C.D. see Clow, A., 433P

Marsden, C.D. see Jenner, P., 432P

MARSDEN, C.D. see JENNER, P., 440P

MARTIN, G.R. see CROOKS, JANE R., 474P

MARTIN, I.L. see BAKER, D.G., 469P

MARTIN, W. see BOWMAN, ANN, 327

Martinoli, L. see Fidanza, A., 495P

MASTROIACOVO, P. see FIDANZA, A., 495P

MATHIEU, MARIE-NOELLE see CHEVILLARD, C., 418P

MEDGETT, I.C. see McCullouch, M.W., 535

MEGAZZINI, IRENE see DELLA CORTE, LAURA, 449P

Meli, A. see Del Soldato, P., 33

METCALF, G. see Howe, S.J. 427P

METCALF, G., REES, J.M.H. & WARD, SUSAN J. Dependence, tolerance and cross-tolerance induced by morphine and ethylketocyclazocine, 427P

MILLER, R.C. see Brine, F., 553

MILLSON, D.S. & SMITH, B. REES (introduced by RAWLINS, M.D.) The effects of temperature and ionic environment on antagonist binding to cardiac β -adrenoceptors, 416P

MILNE, A.A., SUMANO, H. & WILSON, C.W.M. Hay Fever: diagnosis and treatment with vitamin C, 494P

MOBILIO, RENATA see DELLA CORTE, 449P

MOHLER, H. see BOWERY, N.G., 445P

Monks, R. see Cannon, P.J., 506P

MONTGOMERY, S.C. see Bradley, J.R., 501P

MONTI, J.M. Effects of neuroleptics with central dopamine and noradrenaline receptor blocking properties in the L-DOPA and (+)-amphetamine-induced waking EEG in the rat, 87

Moore, N.A. see Doggett, N.S., 434P

Moors, J.A. see Barlow, J.J., 412P

MORINAN, A. see LEONARD, B.E., 439P

MORRIS, H.R., PIPER, PRISCILLA J., TAYLOR, G.W. & TIPPINS, J.R. Comparative studies on immunologically and non-immunologically produced slow-reacting substances from man, guinea-pig and rat, 179

Mullen, P.W. Pharmacokinetics of phenytoin and liver cytochrome P-450 levels in mice after single doses of Corynebacterium parvum, 471P

Mulvihill, T.P. see Cannon, P.J., 506P

Murnaghan, M.F. Sensitizing effect of sodium palmitate to an induced arrhythmia in the isolated perfused hypoxic rabbit heart, 411P

MURPHY, P. see CANNON, P.J., 506P

MURRAY, N. see BALFOUR, D., 474P

Ν

NAHORSKI, S.R. see DICKINSON, K., 479P

NAHORSKI, S.R. & SRIWATANAKUL, K. Analysis of the activity and distribution of β -adrenoceptor antagonists in the rat using an *ex vivo* receptor binding assay, 415P

Nasjletti, A. see Malik, K.U., 269

Naylor, R.J. see Costall, B., 475P

NEAME, R.L.B. see IMMS, F.J., 367

NEY, URSULA M. see MACLAGAN, JENNIFER, 488P

NIES, ALAN S. see GERBER, G., 217

NILWISES, N. see BISSET, G.W., 575

NUTTALL, A. see BARLOW, J.J., 412P

0

OAKES, D.J. see Evans, R.H., 591

O'CONNELL, C. see CANNON, P.J., 504P

O CONNELL, C. see CANNON, P.J., 505P

O'CONNOR, S.E. see Brown, R.A., 421P

ODUMOSU, A. & WILSON, C.W.M. Hypocholesterolemic effects of vitamin C, clofibrate and diosgenin in male guinea-pigs, 456P

OKPAKO, D.T. see SOKUNDI, YETUNDE O.O., 464P

OKINE, L. see IOANNIDES, C., 451P

OSUIDE, G. see LAHAN, G.D., 441P

P

PALFREYMAN, M.G. see FOZARD, J.R., 461P

Palfreyman, M.G. see Jung, M.J., 460P

PARKE, D.V. see IOANNIDES, C., 451P

PARRATT, J.R. see McCaig, Dorothy, 239

PARSONS, M.E. see BUNCE, K.T., 123

PATON, W.D.M. see HALLIDAY, D.J., 229

PATON, W.D.M. see LITTLE, HILARY J., 221

PELAYO, F. see DUBOCOVICH, L., 417P

Perkins, N.M. & Stone, T.W. Adenosine may mediate neuronal depressant effects of morphine, 476P

PERROT, P. see CAVERO, I., 283

PICKENS, JOAN T. see FAIRBAIRN, J.W., 379

PINNOCK, R.D., TURNBULL, M.J. & WOODRUFF, G.N. Effects of peptides on neurones in the substantia nigra and nucleus accumbens, 429P

PIPER, PRISCILLA J. see LEWIS, G.P., 393

PIPER, PRISCILLA J. see MORRIS, H.R., 179

PIPER, PRISCILLA J. & SEALE, J.P. Non-immunological release of slow-reacting substance from guinea-pig lungs, 67

PLANKER, M. see CUSACK, N.J., 153

Powis, D.A. see Imms, F.J., 367

PRATT, J. see JENNER, P., 440P

PUGH, D.M. & SUMANO, H.S. The effects of oestradiol- 17β and tamoxifen on the development of mouse embryos cultured over collagen, 458P

PUN, R.Y.K. see BEVAN, P., 478P

PYCOCK, C.J. see KERWIN, R.W., 323

Q

QUEEN, GARY see CHOW, EDWIN, 345

R

RAISMAN, RITA see BRILEY, M., 434P
RAITERI, M. see CERRITO, F., 424P
RAND, M. J. see HOPE, W. 185
RAND, M.J. see MCCULLOUCH, M.W., 535
RAWLINS, M.D. see MILLSON, D.S., 416P
REAVILL, C. see CLOW, A., 433P
REAVILL, C. see JENNER, P., 432P
REES, J.M.H. see METCALE, 427P
REYNOLDS, E.H. see JENNER, P., 440P
RIBEREAU-GAYON, G. see JUNG, M.J., 460P
RICHARDSON, P.D.I. see GRANGER, D.N., 361
ROACH, A.G. see CAVERO, I., 283
ROCH-ARVEILLER, M. see BRADSHAW, D., 472P
RODDIE, I.C. see JAMISON, J.P., 465P

RODGER, I.W. Effects of Ca²⁺ withdrawal and verapamil on excitation-contraction coupling in rabbit pulmonary vascular smooth muscle, 467P

ROGERS, J. see HARDY, J.G., 459P ROONEY, P.J. see KIRKPATRICK, C.T., 464P ROWAN, M.J. see CHAMBERS, P.L., 495P

RUMSBY, P.C. & SHEPHERD, D.M. Effect of penicillamine, hydralazine and phenelzine on the function of pyridox-al-5'-phosphate, 453P

RYAN, M.P. see DEVANE, J., 493P

S

SAIAG, B. see CHEVILLARD, C., 418P
SAKAI, K. A pharmacological analysis of the contractile action of histamine upon the ileal region of the isolated blood-perfused small intestine of the rat. 587
SCATTON, B. see CAVERO, I., 283
SCHOLFIELD, C.N. Leptazol antagonizes the post-synaptic actions of γ-aminobutyric acid, 443P
SCHOLFIELD, C.N. see KIRKPATRICK, C.T., 464P
SCHOLFIELD, C.N. see KIRKPATRICK, C.T., 497P
SEALE, J.P. see JOSE, P.J., 519
SEALE, J.P. see PIPER, PRISCILLA J., 67
SGARAGLI, G.P. see DELLA CORTE, LAURA, 449P
SHAW, J.S. (introduced by TURNBULL, M.J.) Characterization of opiate receptors in the isolated rat rectum, 428P

Shaw, J.S. see Bowery, N.G., 444P
Shepherd, D.M. see Rumsby, D.M., 453P
Shepherd, J.T. see Collis, M.G., 422P
Short, A.H. see Bennett, T., 503P
Short, A.H. see Bradley, J.R., 501P
Shreeve, S.M. see Borkhataria, B., 486P
Shreeve, S.M. see Hemsworth, B.A., 498P
Skidmore, I.F. see Butchers, P.R., 23
Slater, N.T. see Bevan, P., 478P
Slotkin, T.A. see Kirksey, D.F., 387

SMALL, R.C. & WESTON, A.H. Theophylline antagonizes some effects of purines in the intestine but not those of intramural inhibitory nerve stimulation, 301

SMITH, B. REES see MILLSON, D.S., 416P

SMITH, J.A. & SPRIGGS, T.L.B. An effect of neostigmine on the response of the rat anococcygeus muscle to field stimulation, 463P

Snow, H.M. see Barlow, J.J., 412P

SOKUNBI, YETUNDE O.O. (introduced by OKPAKO, D.T.)

Does a prostaglandin modulate cholinergic transmission in the guinea-pig ileum?, 464P

SOLCA, ANNE M. see BROWN, R.A., 421P SPEDDING, M. see FOZARD, J.R., 461P SPRIGGS, T.L.B. see SMITH, J.A. 463P

SRIWATANAKUL, K. see NAHORSKI, S.R., 415P

STABLES, R. see DALY, M.J., 414P

STANSFIELD, F. see LAHAN, G.D., 441P

STEINER, J.A. & GRAHAME-SMITH, D.G. Pharmacological control of corticosterone secretion in the intact rat, 489P

STONE, TREVOR W. Amino acids as neuro-transmitters of corticofugal neurones in the rat: a comparison of glutamate and aspartate, 545

STONE, T.W. see ASSUMPCAO, J.A., 563

STONE, T.W. see PERKINS, N.M., 476P

STORY, D.F. see HOPE, W., 185

STREET, J.A. see HEMSWORTH, B.A., 497P

STRETTLE, R.J. see BATES, R.F.L., 483P

SUGRUE, M.F. Effects of chronic antidepressant administration on the synthesis of monoamines in rat brain, 435P

Sumano, H. see Milne, A.A., 494P Sumano, H.S. see Pugh, D.M., 458P Sweetman, A.J. see Lovett, G.S., 480P

SZABADI, E. see BEVAN, P., 478P

T

TABERNER, P.V. Effects of sodium valproate and ethanolamine-O-sulphate on GABA metabolism in vivo 441P TAMARGO, J. Electrophysiological effects of bunaphtine on

guinea-pig myocardium, 410P TAMMISO, REMIGIO see MANTEGAZZA, PAOLO, 103

TAYLOR, A.E. see GRANGERMD, N., 361 TAYLOR, G.W. see MORRIS, H.R., 179

Taylor, Patricia M. see Cockbill, S.R., 73

TERRAR, D.A. see CLARK, AMANDA L., 481P

THEODOROU, A. see CLOW, A., 433P

THOMAS, D.V. see GARCHIA, G., 454P

THOMPSON, L.E. see BUTCHERS, P.R., 23

TIPPINS, J.R. see MORRIS, H.R., 179

TOFFANO, G. see BIGON, E., 611

TOMLINSON, D.R. A card and board game to reinforce learning of elementary clinical pharmacology, 501 P

TOMLINSON, D.R. see BENNETT, T., 503P

TOMLINSON, D.R. see BYRNE, A.J., 462P

TOWART, R. & KAZDA, S. The cellular mechanism of action of nimodipine (BAY, E. 9736), a new calcium antagonist, 409P

TRIMBLE, I.M.G. see BRADLEY, J.R., 501P
TUCKER, MARY J. see BILLINGHAM, M.E.J., 450P
TUFFERY, A.A. see BOTTING, REGINA M., 504P
TURNBULL, M.J. see BOWERY, N.G., 444P
TURNBULL, M.J. see PINNOCK, R.D., 429P
TURNBULL, M.J. see SHAW, J.S., 428P

v

Vardey, C.J. see Butchers, P.R., 23 Veitch, G.B.A. see Borkhataria, B., 486P Veitch, G.B.A. see Hemsworth, B.A., 498P VERGARA, G.A. see LIVINGSTON, A., 473P
VICENTINI, LUCIA see MANTEGAZZA, PAOLO, 103
VIGO, CARMEN see LEWIS, G.P., 393
VOGT, MARTHE see FUENMAYOR, LUIS D., 115
VOGT, MARTHE see FUENMAYOR, LUIS, 309
VOLTERRA, G. see DEL SOLDATO, P., 33

W

WAGNER, J. see FOZARD, J.R., 461P WAGNER, J. see JUNG, M.J., 460P WAIT, CHRISTINE P. see FREEDMAN, S.B., 430P WALKER, R. & WILSON, KEITH A. Prostaglandins and the contractile action of bradykinin on the longitudinal muscle of rat isolated ileum, 527 WALTI, M. see BISSET, G.W., 575 WARD, SUSAN J. see METCALF, G., 427P WATKINS, J.C. see Evans, R.H., 591 WATON, N.G. see JACKSON, J., 448P WATTS, A.D. see FENIUK, W., 247 WATTS, A.D., see FENIUK, W., 423P WEETMAN, D.F. see SWEETMAN, G.S., 480P WEINBERG, JULIO see ALTURA, BURTON M., 255 WELLS, J.W. see BIRDSALL, N.J.M., 371 WESTON, A.H. see SMALL, R.C., 301 WESTWICK, J. see GORDON, D., 17 WHALLEY, E.T. see CAREY, BERNADETTE, 13 WHEATLEY, A.M. see AHERN, C.P., 425P WHEELDON, A. see BUTCHERS, P.R., 23 WHITING, SUSAN B. see DREW, G.M., 207

WILLIAMS, K.D. see HARROWING, P.D., 482P WILLIGENS, M.T. see LLOYD, K.G., 442P WILSON, C.G. see BRADLEY, J.R., 501P WILSON, C.G. see HARDY, J.G., 459P WILSON, C.G. see JOHNSON, F., 502P WILSON, C.W.M. see AHERN, C.P., 425P WILSON, C.W.M. see AKSOY, M., 495P WILSON, C.W.M. see FIDANZA, A., 495P WILSON, C.W.M. see HEYWOOD, J., 504P WILSON, C.W.M. see LEWIS, A., 457P WILSON, C.W.M. see MILNE, A.A., 494P WILSON, C.W.M. see ODUMOSU, A., 456P WILSON, G. ANN see FURMAN, B.L., 488P WILSON, KEITH A. see WALKER, R., 527 WILSON, P. see AHERN, C.P., 425P WOODRUFF, G.N. see FREEDMAN, S.B., 430P WOODRUFF, G.N. see PINNOCK, R.D., 429P WOODS, AUDREY M. see BLACKHAM, A., 447P WOODWARD, J.K. see FOZARD, J.R., 461P WORCEL, M. see CHEVILLARD, C., 418P WORMS, P. see LLOYD, K.G., 442P WYLLIE JOHN H. see COOPER, MARIE, 79 WYLLIE, M.G. see GILBERT, J.C., 455P

Z

Zambotti, Fernanda see Mantegazza, Paolo, 103 Zeitlin, I.J. see Al-Haboubi, H.A., 446P Zonta, Nerina see Mantegazza, Paolo, 103 Zraika, Monique see Jung, M.J., 460P