

INDEX

Volume 168, July–August 1969

- Acetylcholine
 direct effects on pulmonary veins in intact dogs, 96
 nicotinic and muscarinic receptors in cardiac sympathetic ganglia of dog, 106
- Acetylsalicylic acid, nonsteroidal antirheumatic drug, Evans blue-carrageenan pleural effusion as a model for assay of, 199
- Acid hydrolysis, isolation of two different glucuronide metabolites of naloxone from urine of rabbit and chicken, 180
- Adams, W. J., Yeh, S. Y., Woods, L. A. and Mitchell, C. L.: Drug-test interaction as a factor in the development of tolerance to the analgesic effect of morphine, 251
- Na⁺,K⁺-Adenosine triphosphatase
 cardiac, possible involvement in mechanism of action of cardiac glycosides, 31
 from rat heart, insensitivity to cardiac glycosides, 42
- Adenyl cyclase, of rat pineal gland, effects of environmental lighting and chronic denervation on activation by norepinephrine and sodium fluoride, 146
- Adrenergic blocking drug, *beta*, studies on *dl*-4-(2-hydroxy-3-isopropylaminopropoxy)-indole (LB 46), 116
- Adrenergic nerve endings, of rabbit pulmonary artery, effects of nicotine, dimethylphenylpiperazinium and cholinergic blocking agents at, 127
- Adrenergic neurohumors, drug-induced changes in availability at central adrenergic effector sites, 272
- Adrenergic receptors, *alpha* and *beta*, influence on negative chronotropic effect of tyramine on isolated guinea-pig atria, 290
- Ailion, J., *see* Bliss, E. L., 258
- Alcohol, ethyl, acquisition and loss of tolerance by rat, 244
- Aldosterone secretion, effects of valyl⁵-angiotensin II and valyl⁵- β -(pyrazolyl-3)-L-alanyl⁶-angiotensin II on, 295
- Alkaloids, absorption of, isolation of two different glucuronide metabolites of naloxone from urine of rabbit and chicken, 180
- Allen, J. C. and Schwartz, A.: A possible biochemical explanation for the insensitivity of the rat to cardiac glycosides, 42
- Allen, J. C., *see* Schwartz, A., 31
- Alpha* adrenergic receptors, influence on negative chronotropic effect of tyramine on isolated guinea-pig atria, 290
- Amines, neurogenic, response to aggregation and strangers, 258
- Amino acid, α -methyltyrosine, renal handling of, 310
- Aminophylline, effect on large and small coronary vessels, 70
- Ammonium ions, mono- and bisquaternary, accumulation by kidney cortex slices, 6
- Amphetamine, detection by gas chromatography of a halogenated derivative of, 205
- Analgesic drug, morphine, drug-test interaction as a factor in development of tolerance to, 251
- Anesthesia, induced by 2-(ethylamino)-2-(2-thienyl)cyclohexanone·HCl (CI-634), 171
- Aniline hydroxylase, hepatic microsomal, ethylmorphine N-demethylase and, associated with pregnancy in rats, alterations in kinetic constants for, 224
- Antirheumatic drugs, nonsteroidal, Evans blue-carrageenan pleural effusion as a model for assay of, 199
- Archer, E. G., *see* King, L. J., 163
- Artery, pulmonary, rabbit, effects of nicotine, dimethylphenylpiperazinium and cholinergic blocking agents at adrenergic nerve endings of, 127
- ATPase
 Na⁺,K⁺-, effects of cardiac glycosides on, 31
 Na⁺,K⁺-, from rat heart, insensitivity to cardiac glycosides, 42
- Atria, guinea-pig, isolated, negative chronotropic effect of tyramine on, 290
- Atrium, rabbit, quinidine-induced changes in excitability and contractility in, 47
- Atropine
 influence on negative chronotropic effect of tyramine on isolated guinea-pig atria, 290
 nicotinic and muscarinic receptors in cardiac sympathetic ganglia of dog, 106
- Avoidance response, conditioned, motor activity and, effect of α -methyl dopa on reserpine-induced suppression of, 153
- Barbiturate, convulsant, 5-(2-cyclohexylidene-ethyl)-5-ethyl barbituric acid, effects on spinal monosynaptic pathway, 283
- Barr, C. F., *see* Polet, H., 187
- Benz, F. W. and Long, J. P.: Structure-activity relationships of N-alkyl and heterocyclic analogs of hemicholinium-3, 315
- 3,4-Benzpyrene, effect on biliary flow, 218
- Berman, N. D., *see* LeBlanc, A. E., 244
- Beta* adrenergic blocking drug, studies on *dl*-4-

- (2-hydroxy-3-isopropylaminopropoxy)-indole (LB 46), 116
- Beta* adrenergic receptors, influence on negative chronotropic effect of tyramine on isolated guinea-pig atria, 290
- Bevan, J. A., *see* Nedergaard, O. A., 127
- Biliary flow, after microsomal enzyme induction, 218
- Bliss, E. L. and Ailion, J.: Response of neurogenic amines to aggregation and strangers, 258
- Blocking agents, cholinergic, nicotine, dimethylphenylpiperazinium and, effects at adrenergic nerve endings of rabbit pulmonary artery, 127
- Blocking drug, adrenergic, *beta*, studies on *dl*-4-(2-hydroxy-3-isopropylaminopropoxy)-indole (LB 46), 116
- Blood pressure, effects of valyl⁵-angiotensin II and valyl⁵- β -(pyrazolyl-3)-L-alanyl⁶-angiotensin II on, 295
- Blood serum, binding of gallium by, 193
- Bohner, B., *see* Chen, G., 171
- Boissier, J. R., *see* Giudicelli, J.-F., 116
- Bone
localization of lesions by gallium, 193
rat, embryonic, inhibition by steroids of parathyroid hormone-induced Ca⁴⁵ release from *in vitro*, 211
- Boukma, S. J., *see* Johnson, G. A., 229
- Brain
energy reserves and cations *in vivo*, effects of lithium on, 163
rat, separation of catecholamine-storing synaptosomes in different regions of, 264
- Buckley, J. P., *see* Hageman, W. E., 295
- Ca⁴⁵, release from embryonic rat bone *in vitro*, parathyroid hormone-induced, inhibition by steroids of, 211
- Caffeine, effects on glucose metabolism of polymorphonuclear leukocytes, 240
- Calcium
binding to cardiac microsomes, mitochondria and Na⁺,K⁺-adenosine triphosphatase, 31
concentration, effect on quinidine-induced changes in myocardial excitability and contractility, 47
- Call, J. B., *see* Guarino, A. M., 224
- Calorigenesis, catecholamine-induced, from lipolysis and glycogenolysis in intact animals, dissociation of, 137
- Carbamylcholine, effect on cardiac action potentials in normal, denervated and reserpine-pretreated cat heart muscle, 60
- Cardiac glycosides
mechanism of action of, possible involvement of cardiac Na⁺,K⁺-adenosine triphosphatase in, 31
possible biochemical explanation for insensitivity of rat to, 42
- Cardiac sympathetic ganglia, of dog, nicotinic and muscarinic receptors in, 106
- Carl, J. L., *see* King, L. J., 163
- Carrageenan, pleural effusion caused by Evans blue and, as a model for assay of nonsteroidal antirheumatic drugs, 199
- Castellanet, M., *see* King, L. J., 163
- Catalepsy, produced by 2-(ethylamino)-2-(2-thienyl)cyclohexanone·HCl (CI-634), 171
- Catecholamine(s)
-induced calorigenesis from lipolysis and glycogenolysis in intact animals, dissociation of, 137
in mice, response to aggregation and strangers, 258
role in electrical membrane activity and frequency-force relations in normal, denervated and reserpine-pretreated cat heart muscle, 60
-storing synaptosomes in different regions of rat brain, separation of, 264
- Cations, brain energy reserves *in vivo* and, effects of lithium on, 163
- Central nervous system
effect of 2-(ethylamino)-2-(2-thienyl)cyclohexanone·HCl (CI-634), 171
effects of valyl⁵-angiotensin II and valyl⁵- β -(pyrazolyl-3)-L-alanyl⁶-angiotensin II on, 295
- Cervoni, P., *see* Spilker, B., 60
- Chen, G., Ensor, C. R. and Bohner, B.: The pharmacology of 2-(ethylamino)-2-(2-thienyl)cyclohexanone·HCl (CI-634), 171
- Chez, R. A., Horger, E. O., III and Schultz, S. G.: The effect of ethacrynic acid on sodium transport by isolated rabbit ileum, 1
- Chlorcyclizine, effect on biliary flow, 218
- Chlordane, effect on biliary flow, 218
- Chlorisondamine, nicotinic and muscarinic receptors in cardiac sympathetic ganglia of dog, 106
- Chloroquine-3-H³, uptake by *Plasmodium knowlesi* *in vitro*, 187
- Chloroquine phosphate, nonsteroidal antirheumatic drug, Evans blue-carrageenan pleural effusion as a model for assay of, 199
- Cholesterol, effect on bone resorption, 211
- Cholinergic blocking agents, nicotine, dimethylphenylpiperazinium and, effects at adrenergic nerve endings of rabbit pulmonary artery, 127
- Chromatography, gas, of a halogenated derivative of amphetamine, method for detecting, 205
- Chromonar, effect on large and small coronary vessels, 70
- Chronotropic effect, negative, of tyramine on isolated guinea-pig atria, 290
- CI-634, 2-(ethylamino)-2-(2-thienyl)cyclohexanone·HCl, pharmacology of, 171

- Conditioned avoidance response, motor activity and, effect of α -methyl dopa on reserpine-induced suppression of, 153
- Contractility, and excitability, myocardial, quinidine-induced changes in, factors influencing, 47
- Coronary dilators, and nitrates, effect on large and small coronary vessels, an hypothesis for mechanism of action of nitrates, 70
- Coronary vessels, large and small, effect of coronary dilators on, an hypothesis for mechanism of action of nitrates, 70
- Cortex slices, kidney, binding of organic bases to, 6
- Corticosterone, inhibitor of parathyroid hormone-induced Ca^{45} release from embryonic rat bone *in vitro*, 211
- Crew, M. C., *see* DiCarlo, F. J., 235
- Decamethonium, binding to kidney cortex slices, 6
- Denervation, chronic, environmental lighting and, effects on activation of adenylyl cyclase of rat pineal gland by norepinephrine and sodium fluoride, 146
- Desipramine, (DMI), modification of availability of norepinephrine released by reserpine in hypothalamus of rat *in vivo* by, 272
- Dexamethasone, inhibitor of parathyroid hormone-induced Ca^{45} release from embryonic rat bone *in vitro*, 211
- Diamond, J. and Marshall, J. M.: A comparison of the effects of various smooth muscle relaxants on the electrical and mechanical activity of rat uterus, 21
- Diamond, J. and Marshall, J. M.: Smooth muscle relaxants: Dissociation between resting membrane potential and resting tension in rat myometrium, 13
- DiCarlo, F. J., Melgar, M. D., Haynes, L. J., Gala, R. L. and Crew, M. C.: Metabolism of pentaerythritol trinitrate and pentaerythritol by dogs, 235
- Digoxin, effects on cardiac Na^+ , K^+ -adenosine triphosphatase microsomes and mitochondria from dog and beef, 31
- Dimethylphenylpiperazinium, nicotine, cholinergic blocking agents and, effects at adrenergic nerve endings of rabbit pulmonary artery, 127
- Dimitrov, N. V., Miller, J. and Ziegler, S. R.: The effects of caffeine on glucose metabolism of polymorphonuclear leukocytes, 240
- Dingell, J. V., *see* Sulser, F., 272
- Dipyridamole, effect on large and small coronary vessels, 70
- Dopa, α -methyl, effect on reserpine-induced suppression of motor activity and conditioned avoidance response, 153
- Dopamine
 attenuation of renal and mesenteric vasodilation by haloperidol, 303
 in mice, response to aggregation and strangers, 258
- Dopamine β -hydroxylase, inhibition by aromatic and alkyl thioureas, 229
- Downes, H. and Williams, J. K.: Effects of a convulsant barbiturate on the spinal mono-synaptic pathway, 283
- Electron capture, detection of amphetamine derivatives by, 205
- Ellis, S., *see* Kennedy, B. L., 137
- Ensor, C. R., *see* Chen, G., 171
- Environmental lighting, chronic denervation and, effects on activation of adenylyl cyclase of rat pineal gland by norepinephrine and sodium fluoride, 146
- Enzyme induction, microsomal, biliary flow after, 218
- Epinephrine
 cardiac stimulating effects of, antagonized by LB 46, 116
 effect on rat myometrium, 13, 21
- Epinephrine, renal vasodilating action of, attenuation by haloperidol, 303
- Ertel, R. J., *see* Hageman, W. E., 295
- Erythrocytes, parasitized with malaria plasmodia, uptake of chloroquine-3- H^3 by *Plasmodium knowlesi* *in vitro*, 187
- Ethacrynic acid, effect on sodium transport by isolated rabbit ileum, 1
- Ethanol, acquisition and loss of tolerance by rat, 244
- Ethylenebis(trimethylammonium), binding to kidney cortex slices, 6
- Ethylmorphine N-demethylase, hepatic microsomal, aniline hydroxylase and, associated with pregnancy in rats, alterations in kinetic constants for, 224
- Evans blue, pleural effusion caused by carrageenan and, as a model for assay of nonsteroidal anti-rheumatic drugs, 199
- Excitability, and contractility, myocardial, quinidine-induced changes in, factors influencing, 47
- Flacke, W., *see* Fleisch, J. H., 106
- Fleisch, J. H., Flacke, W. and Gillis, R. A.: Nicotinic and muscarinic receptors in the cardiac sympathetic ganglia of the dog, 106
- Flufenamic acid, nonsteroidal antirheumatic drug, Evans blue-carrageenan pleural effusion as a model for assay of, 199
- Fujimoto, J. M.: Isolation of two different glucuronide metabolites of naloxone from the urine of rabbit and chicken, 180

- Gala, R. L., *see* DiCarlo, F. J., 235
- Gallium, binding by blood serum, 193
- Ganglia, sympathetic, cardiac, of dog, nicotinic and muscarinic receptors in, 106
- Gas chromatography, of a halogenated derivative of amphetamine, method for detecting, 205
- Gibbins, R. J., *see* LeBlanc, A. E., 244
- Gillette, J. R., *see* Guarino, A. M., 224
- Gillis, R. A., *see* Fleisch, J. H., 106
- Giudicelli, J.-F., Schmitt, H. and Boissier, J. R.: Studies on *dl*-4-(2-hydroxy-3-isopropylamino-propoxy)-indole (LB 46), a new potent *beta* adrenergic blocking drug, 116
- Gland, pineal, rat, effects of environmental lighting and chronic denervation on activation of adenylyl cyclase by norepinephrine and sodium fluoride, 146
- Glucocorticoids, effect on bone resorption, 211
- Glucose metabolism, of polymorphonuclear leukocytes, effects of caffeine on, 240
- Glucuronide metabolites, two different, of naloxone, isolation from urine of rabbit and chicken, 180
- Glycogenolysis, lipolysis and, in intact animals, dissociation of catecholamine-induced calorigenesis from, 137
- Glycosides
 cardiac, mechanism of action of, possible involvement of cardiac Na⁺, K⁺-adenosine triphosphatase in, 31
 cardiac, possible biochemical explanation for insensitivity of rat to, 42
- Goldberg, L. I., *see* Yeh, B. K., 303
- Gold sodium thiomalate, nonsteroidal antirheumatic drug, Evans blue-carrageenan pleural effusion as a model for assay of, 199
- Gram, T. E., *see* Guarino, A. M., 224
- Green, A. I., Snyder, S. H. and Iversen, L. L.: Separation of catecholamine-storing synaptosomes in different regions of rat brain, 264
- Guarino, A. M., Gram, T. E., Schroeder, D. H., Call, J. B. and Gillette, J. R.: Alterations in kinetic constants for hepatic microsomal aniline hydroxylase and ethylmorphine N-methylase associated with pregnancy in rats, 224
- Hageman, W. E., Hofmann, K., Ertel, R. J. and Buckley, J. P.: Some aspects of the pharmacology of valyl⁶- β -(pyrazolyl-3)-L-alanyl⁶-angiotensin II, 295
- Haloperidol, attenuation of dopamine renal and mesenteric vasodilation by, evidence for a specific dopamine receptor, 303
- Harigaya, S., *see* Schwartz, A., 31
- Hartman, R. E. and Hayes, R. L.: The binding of gallium by blood serum, 193
- Hayes, R. L., *see* Hartman, R. E., 193
- Haynes, L. J., *see* DiCarlo, F. J., 235
- Heart, excitability and contractility, effects of quinidine on, 47
- Heart muscle, cat, normal, denervated and reserpine-pretreated, electrical membrane activity and frequency-force relations in, 60
- Hefner, M. A., *see* Winbury, M. M., 70
- Hemicholinium-3, structure-activity relationships of N-alkyl and heterocyclic analogs of, 315
- Hexamethonium
 binding to kidney cortex slices, 6
 influence on negative chronotropic effect of tyramine on isolated guinea-pig atria, 290
 nicotinic and muscarinic receptors in cardiac sympathetic ganglia of dog, 106
- Histamine, direct effects on pulmonary veins in intact dogs, 96
- Histidine, effect on renal handling of α -methyltyrosine, 310
- Hofmann, K., *see* Hageman, W. E., 295
- Hook, J. B. and Moore, K. E.: The renal handling of α -methyltyrosine, 310
- Horger, E. O., III, *see* Chez, R. A., 1
- Hormone, parathyroid, -induced Ca⁴⁵ release from embryonic rat bone *in vitro*, inhibition by steroids of, 211
- Howe, B. B., *see* Winbury, M. M., 70
- Hydrocortisone, inhibitor of parathyroid hormone-induced Ca⁴⁵ release from embryonic rat bone *in vitro*, 211
- Hydrolysis, acid, isolation of two different glucuronide metabolites of naloxone from urine of rabbit and chicken, 180
- β -Hydroxylase, dopamine, inhibition by aromatic and alkyl thioureas, 229
- Hyman, A. L.: The direct effects of vasoactive agents on pulmonary veins. Studies of responses to acetylcholine, serotonin, histamine and isoproterenol in intact dogs, 96
- Hypothalamus, of rat *in vivo*, modification by desipramine (DMI) of availability of norepinephrine released by reserpine in, 272
- Hypothermia
 effect on binding of cardiac glycosides in subcellular fractions from heart, 31
 influence on electrical membrane activity and frequency-force relations in normal, denervated and reserpine-pretreated cat heart muscle, 60
- Ileum, rabbit, isolated, effect of ethacrynic acid on sodium transport by, 1
- Indomethacin, nonsteroidal antirheumatic drug, Evans blue-carrageenan pleural effusion as a model for assay of, 199
- Indoxole, nonsteroidal antirheumatic drug, Evans blue-carrageenan pleural effusion as a model for assay of, 199

- Ions, ammonium, mono- and bisquaternary, accumulation by kidney cortex slices, 6
- Iproveratril, effect on large and small coronary vessels, 70
- Isoproterenol
 cardiovascular effects of, antagonized by LB 46, 116
 direct effects on pulmonary veins in intact dogs, 96
 effect on rat myometrium, 13
- Iversen, L. L., *see* Green, A. I., 264
- Johnson, G. A., Boukma, S. J. and Kim, E. G.: Inhibition of dopamine β -hydroxylase by aromatic and alkyl thioureas, 229
- Kalant, H., *see* LeBlanc, A. E., 244
- Kennedy, B. L. and Ellis, S.: Dissociation of catecholamine-induced calorogenesis from lipolysis and glycogenolysis in intact animals, 137
- Kennedy, B. L. and West, T. C.: Factors influencing quinidine-induced changes in excitability and contractility, 47
- Kidney, handling of α -methyltyrosine, 310
- Kidney cortex slices, binding of organic bases to, 6
- Kim, E. G., *see* Johnson, G. A., 229
- Kinetic constants, for hepatic microsomal aniline hydroxylase and ethylmorphine N-demethylase associated with pregnancy in rats, alterations in, 224
- King, L. J., Carl, J. L., Archer, E. G. and Castellanel, M.: Effects of lithium on brain energy reserves and cations *in vivo*, 163
- Klaassen, C. D.: Biliary flow after microsomal enzyme induction, 218
- LB 46, *dl*-4-(2-hydroxy-3-isopropylaminopropoxy)-indole, a new potent *beta* adrenergic blocking drug, studies on, 116
- LeBlanc, A. E., Kalant, H., Gibbins, R. J. and Berman, N. D.: Acquisition and loss of tolerance to ethanol by the rat, 244
- Leukocytes, polymorphonuclear, effects of caffeine on glucose metabolism of, 240
- Lidoflazine, effect on large and small coronary vessels, 70
- Lipolysis, glycogenolysis and, in intact animals, dissociation of catecholamine-induced calorogenesis from, 137
- Lithium, effects on brain energy reserves and cations *in vivo*, 163
- Liver weight, and biliary flow, after microsomal enzyme induction, 218
- Long, J. P., *see* Benz, F. W., 315
- Magnesium, in brain, effects of lithium on, 163
- Malaria parasite, *Plasmodium knowlesi*, uptake of chloroquine-3-H³ by, *in vitro*, 187
- Mania, elucidation of etiology and treatment of, effects of lithium, 163
- Marshall, J. M., *see* Diamond, J., 13, 21
- McGrath, W. R., *see* Tsai, T. H., 290
- McIsaac, R. J.: The binding of organic bases to kidney cortex slices, 6
- McNay, J. L., *see* Yeh, B. K., 303
- Mecamylamine, nicotinic and muscarinic receptors in cardiac sympathetic ganglia of dog, 106
- Melgar, M. D., *see* DiCarlo, F. J., 235
- Membrane potential, resting, and resting tension, in rat myometrium, dissociation by smooth muscle relaxants, 13
- Metabolism
 glucose, of polymorphonuclear leukocytes, effects of caffeine on, 240
 of catecholamines released by reserpine from intraneuronal storage sites in brain, effect of desipramine, 272
 of pentaerythritol trinitrate and pentaerythritol by dogs, 235
- Metabolites, glucuronide, two different, of naloxone, isolation from urine of rabbit and chicken, 180
- 3-Methylcholanthrene, effect on biliary flow, 218
- α -Methyl dopa, effect on reserpine-induced suppression of motor activity and conditioned avoidance response, 153
- N'-Methylnicotinamide, binding to kidney cortex slices, 6
- α -Methyltyrosine, renal handling of, 310
- Microsomes, heart, effect of cardiac glycosides on, 31
- Miller, J., *see* Dimitrov, N. V., 240
- Mitchell, C. L., *see* Adams, W. J., 251
- Mitochondria, heart, effect of cardiac glycosides on, 31
- Monosynaptic pathway, spinal, effects of a convulsant barbiturate on, 283
- Moore, K. E., *see* Hook, J. B., 310
- Morphine, drug-test interaction as a factor in development of tolerance to analgesic effect of, 251
- Motor activity, conditioned avoidance response and, effect of α -methyl dopa on reserpine-induced suppression of, 153
- Murdick, P. W., *see* Noonan, J. S., 205
- Muscarinic receptors, and nicotinic, in cardiac sympathetic ganglia of dog, 106
- Muscle
 heart, cat, normal, denervated and reserpine-pretreated, electrical membrane activity and frequency-force relations in, 60
 intestinal, effects of valyl⁵-angiotensin II and valyl⁵- β -(pyrazolyl-3)-L-alanyl⁶-angiotensin II on, 295

- Muscle relaxants
 smooth, comparison of effects on electrical and mechanical activity of rat uterus, 21
 smooth, dissociation between resting membrane potential and resting tension in rat myometrium by, 13
- Myometrium
 rat, comparison of effects of various smooth muscle relaxants on electrical and mechanical activity of, 21
 rat, dissociation between resting membrane potential and resting tension by smooth muscle relaxants in, 13
- Naloxone, two different glucuronide metabolites of, isolation from urine of rabbit and chicken, 180
- Nedergaard, O. A. and Bevan, J. A.: Effects of nicotine, dimethylphenylpiperazinium and cholinergic blocking agents at adrenergic nerve endings of the rabbit pulmonary artery, 127
- Nerve endings, adrenergic, of rabbit pulmonary artery, effects of nicotine, dimethylphenylpiperazinium and cholinergic blocking agents at, 127
- Nervous system
 central, effect of 2-(ethylamino)-2-(2-thienyl)-cyclohexanone-HCl (CI-634), 171
 central, effects of valyl⁶-angiotensin II and valyl⁶- β -(pyrazolyl-3)-L-alanyl⁶-angiotensin II on, 295
- Neurogenic amines, response to aggregation and strangers, 258
- Nicotine, dimethylphenylpiperazinium, cholinergic blocking agents and, effects at adrenergic nerve endings of rabbit pulmonary artery, 127
- Nicotinic receptors, and muscarinic, in cardiac sympathetic ganglia of dog, 106
- Nikethamide, effect on biliary flow, 218
- Nitrates, and other coronary dilators, effect on large and small coronary vessels, an hypothesis for mechanism of action of, 70
- Nitroglycerin
 effect on large and small coronary vessels, 70
 effect on rat myometrium, 13, 21
- Noonan, J. S., Murdick, P. W. and Ray, R. S.: A method for detecting amphetamine using gas chromatography of a halogenated derivative, 205
- Norepinephrine
 cardiac stimulating effects of, antagonized by LB 46, 116
 effect on rat myometrium, 13
 exogenous and endogenous, subcellular localization of, in different regions of rat brain, 264
 in mice, response to aggregation and strangers, 258
 released by reserpine in hypothalamus of rat *in vivo*, modification by desipramine (DMI) of availability of, 272
 role in electrical membrane activity and frequency-force relations in normal, denervated and reserpine-pretreated cat heart muscle, 60
 sodium fluoride and, effects of environmental lighting and chronic denervation on activation of adenylyl cyclase of rat pineal gland by, 146
- Organic bases, binding to kidney cortex slices, 6
- Ouabain
 effect on Na⁺, K⁺-adenosine triphosphatase from rat kidney and heart, 42
 effects on cardiac Na⁺, K⁺-adenosine triphosphatase microsomes and mitochondria from dog and beef, 31
 -induced ventricular tachycardia, reversion by LB 46, 116
- Owens, M. L., *see* Sulser, F., 272
- Papaverine
 effect on large and small coronary vessels, 70
 effect on rat myometrium, 13, 21
- Parathyroid hormone-induced Ca⁴⁵ release, from embryonic rat bone *in vitro*, inhibition by steroids of, 211
- d*-Penicillamine, nonsteroidal antirheumatic drug, Evans blue-carrageenan pleural effusion as a model for assay of, 199
- Pentaerythritol, pentaerythritol trinitrate and, metabolism by dogs, 235
- Pentaerythritol tetranitrate, effect on large and small coronary vessels, 70
- Pentaerythritol trinitrate, pentaerythritol and, metabolism by dogs, 235
- Pentobarbital, effects on spinal monosynaptic pathway, 283
- Phenobarbital, effect on biliary flow, 218
- Phentolamine, influence on negative chronotropic effect of tyramine on isolated guinea-pig atria, 290
- Phenylbutazone, effect on biliary flow, 218
- Physostigmine, influence on negative chronotropic effect of tyramine on isolated guinea-pig atria, 290
- Pineal gland, rat, effects of environmental lighting and chronic denervation on activation of adenylyl cyclase by norepinephrine and sodium fluoride, 146
- Pinocytosis, mechanism of uptake of chloroquine-3-H³ by *Plasmodium knowlesi in vitro*, 187
- Plasma, horse, detection of amphetamine by gas chromatography of a halogenated derivative, 205
- Plasmodium knowlesi*, uptake of chloroquine-3-H³ by, *in vitro*, 187

- Polet, H. and Barr, C. F.: Uptake of chloroquine-3-H³ by *Plasmodium knowlesi* *in vitro*, 187
- Polymorphonuclear leukocytes, effects of caffeine on glucose metabolism of, 240
- Pregnancy, in rats, alterations in kinetic constants for hepatic microsomal aniline hydroxylase and ethylmorphine N-demethylase associated with, 224
- Prenylamine, effect on large and small coronary vessels, 70
- Probenecid, effect on renal handling of α -methyl-tyrosine, 310
- Propranolol, influence on negative chronotropic effect of tyramine on isolated guinea-pig atria, 290
- Pulmonary artery, rabbit, effects of nicotine, dimethylphenylpiperazinium and cholinergic blocking agents at adrenergic nerve endings of, 127
- Pulmonary veins, in intact dogs, direct effects of vasoactive agents on, 96
- Pyruvate production, in isolated rabbit ileum, effect of ethacrynic acid on, 1
- Quinidine-induced changes in excitability and contractility, factors influencing, 47
- Ray, R. S., *see* Noonan, J. S., 205
- Receptor(s)
alpha and *beta* adrenergic, influence on negative chronotropic effect of tyramine on isolated guinea-pig atria, 290
 dopamine, specific, attenuation of dopamine renal and mesenteric vasodilation by haloperidol, 303
 nicotinic and muscarinic, in cardiac sympathetic ganglia of dog, 106
- Reserpine
 -induced suppression of motor activity and conditioned avoidance response, effect of α -methyl dopa on, 153
 in hypothalamus of rat *in vivo*, modification by desipramine (DMI) of availability of norepinephrine released by, 272
 negative chronotropic effect of tyramine on isolated guinea-pig atria pretreated with, 290
 -pretreated, normal and denervated cat heart muscle, electrical membrane activity and frequency-force relations in, 60
- Saliva, horse, detection of amphetamine by gas chromatography of a halogenated derivative, 205
- Sancilio, L. F.: Evans blue-carrageenan pleural effusion as a model for the assay of non-steroidal antirheumatic drugs, 199
- Schmitt, H., *see* Giudicelli, J.-F., 116
- Schroeder, D. H., *see* Guarino, A. M., 224
- Schultz, S. G., *see* Chez, R. A., 1
- Schwartz, A., Allen, J. C. and Harigaya, S.: Possible involvement of cardiac Na⁺,K⁺-adenosine triphosphatase in the mechanism of action of cardiac glycosides, 31
- Schwartz, A., *see* Allen, J. C., 42
- Scopolamine
 influence on negative chronotropic effect of tyramine on isolated guinea-pig atria, 290
 nicotinic and muscarinic receptors in cardiac sympathetic ganglia of dog, 106
- Seiden, L. S., *see* Uretsky, N. J., 153
- Serotonin
 direct effects on pulmonary veins in intact dogs, 96
 in mice, response to aggregation and strangers, 258
- Serum, blood, binding of gallium by, 193
- Smooth muscle relaxants
 comparison of effects on electrical and mechanical activity of rat uterus, 21
 dissociation between resting membrane potential and resting tension in rat myometrium by, 13
- Snyder, S. H., *see* Green, A. I., 264
- Sodium
 concentration, effect on quinidine-induced changes in myocardial excitability and contractility, 47
 in brain, effects of lithium on, 163
- Sodium fluoride, norepinephrine and, effects of environmental lighting and chronic denervation on activation of adenylyl cyclase of rat pineal gland by, 146
- Sodium transport, by isolated rabbit ileum, effect of ethacrynic acid on, 1
- Spilker, B. and Cervoni, P.: Electrical membrane activity and frequency-force relations in normal, denervated and reserpine-pretreated cat heart muscle, 60
- Spinal monosynaptic pathway, effects of a convulsant barbiturate on, 283
- Stern, P. H.: Inhibition by steroids of parathyroid hormone-induced Ca⁴⁵ release from embryonic rat bone *in vitro*, 211
- Steroids, inhibitors of parathyroid hormone-induced Ca⁴⁵ release from embryonic rat bone *in vitro*, 211
- Strada, S. J., *see* Sulser, F., 272
- Sulser, F., Owens, M. L., Strada, S. J. and Dingell, J. V.: Modification by desipramine (DMI) of the availability of norepinephrine released by reserpine in the hypothalamus of the rat *in vivo*, 272
- Sympathetic ganglia, cardiac, of dog, nicotinic and muscarinic receptors in, 106
- Synaptosomes, catecholamine-storing, in different regions of rat brain, separation of, 264

- Tachycardia, ventricular, ouabain-induced, reversion by LB 46, 116
- Temperature
effect on binding of cardiac glycosides in sub-cellular fractions from heart, 31
influence on electrical membrane activity and frequency-force relations in normal, denervated and reserpine-pretreated cat heart muscle, 60
- Tension, resting, and resting membrane potential, in rat myometrium, dissociation by smooth muscle relaxants, 13
- Testosterone, inhibitor of parathyroid hormone-induced Ca^{45} release from embryonic rat bone *in vitro*, 211
- Tetracaine, effect on rat myometrium, 13, 21
- Tetraethylammonium, binding to kidney cortex slices, 6
- Tetramethylenebis(trimethylammonium), binding to kidney cortex slices, 6
- Thioureas, aromatic and alkyl, inhibition of dopamine β -hydroxylase by, 229
- Tryptophan, effect on renal handling of α -methyltyrosine, 310
- Tsai, T. H., Wendt, R. L. and McGrath, W. R.: The negative chronotropic effect of tyramine on isolated guinea-pig atria, 290
- d*-Tubocurarine, nicotinic and muscarinic receptors in cardiac sympathetic ganglia of dog, 106
- Tyramine, negative chronotropic effect on isolated guinea-pig atria, 290
- Uptake, of chloroquine-3- H^3 by *Plasmodium knowlesi* *in vitro*, 187
- Uretsky, N. J. and Seiden, L. S.: Effect of α -methyl dopa on the reserpine-induced suppression of motor activity and the conditioned avoidance response, 153
- Urine
horse, detection of amphetamine by gas chromatography of a halogenated derivative, 205
pH and volume, effect on renal handling of α -methyltyrosine, 310
rabbit and chicken, isolation of two different glucuronide metabolites of naloxone from, 180
- Uterus
rat, comparison of effects of various smooth muscle relaxants on electrical and mechanical activity of, 21
rat, dissociation between resting membrane potential and resting tension by smooth muscle relaxants in, 13
- Valyl⁵-angiotensin II, pharmacology of, compared with valyl⁵- β -(pyrazolyl-3)-L-alanyl⁶-angiotensin II, 295
- Valyl⁵- β -(pyrazolyl-3)-L-alanyl⁶-angiotensin II, pharmacology of, compared with valyl⁵-angiotensin II, 295
- Vasoactive agents, direct effects on pulmonary veins in intact dogs, 96
- Vasodilation, renal and mesenteric, dopamine, attenuation by haloperidol, evidence for a specific dopamine receptor, 303
- Veins, pulmonary, in intact dogs, direct effects of vasoactive agents on, 96
- Vessels, coronary, large and small, effect of coronary dilators on, an hypothesis for mechanism of action of nitrates, 70
- Weiss, B.: Effects of environmental lighting and chronic denervation on the activation of adenylyl cyclase of rat pineal gland by norepinephrine and sodium fluoride, 146
- Wendt, R. L., *see* Tsai, T. H., 290
- West, T. C., *see* Kennedy, B. L., 47
- Williams, J. K., *see* Downes, H., 283
- Winbury, M. M., Howe, B. B. and Hefner, M. A.: Effect of nitrates and other coronary dilators on large and small coronary vessels: An hypothesis for the mechanism of action of nitrates, 70
- Woods, L. A., *see* Adams, W. J., 251
- Yeh, B. K., McNay, J. L. and Goldberg, L. I.: Attenuation of dopamine renal and mesenteric vasodilation by haloperidol: Evidence for a specific dopamine receptor, 303
- Yeh, S. Y., *see* Adams, W. J., 251
- Ziegra, S. R., *see* Dimitrov, N. V., 240