

INDEX

Volume 196, January-March, 1976

- Acetaminophen, elimination by anephric patients, 570
- Acetazolamide
effects on movements of anions into posterior chamber of dog eye, 510
effects on lithium reabsorption in rat, 188
- ^3H -Acetylcholine, biosynthesis in rat brain slices, effect of tetrahydrocannabinols, 339
- Acetylcholine, turnover rate in rat striatum, *in vivo*, actions of clozapine and haloperidol on, 323
- Adams, M. D., Earnhardt, J. T., Dewey, W. L. and Harris, L. S.: Vasoconstrictor actions of Δ^8 - and Δ^9 -tetrahydrocannabinol in the rat, 649
- Adenosine
decreased vascular relaxation in hypertensive rats to, 396
effect on myocardial oxygen balance, 445
- Adenosine 3',5'-monophosphate, effect of ethanol on response of toad urinary bladder to, 231
- Adenylate cyclase, stimulation in rat pineal gland, correlation with binding sites of ^3H -*l*-alprenolol, 714
- Adler, M. and Albuquerque, E. X.: An analysis of the action of atropine and scopolamine on the end-plate current of frog sartorius muscle, 360
- Adrenal glands, tolerant and nontolerant dogs, tissue distribution of ^3H - Δ^9 -tetrahydrocannabinol in, 128
- Adrenergic blocking agents, *beta*, central effect on arterial blood pressure, 389
- Adrenergic neuroeffector junction, in cutaneous veins of dog, effects of amide-linked local anesthetics on, 723
- Adrenergic receptor, *beta*, characterization in rat pineal gland, 714
- Adrenergic storage vesicles, in nerve terminals, distribution and properties, 346
- Adrenocorticotropin, influence on response of rats to warfarin, 194
- Akers, H. A., *see* Grady, R. W., 478
- Albuquerque, E. X.
see Adler, M., 360
see Sholtzberger, G. S., 433
- Alcohol
effects on responding maintained under fixed-interval schedules of food or shock presentation, 605
metabolism, role in 2-butanol-induced potentiation of carbon tetrachloride hepatotoxicity, 293
- Aldosterone, effect of prolonged lithium ingestion on response in rats to, 463
- ^3H -*l*-Alprenolol, binding sites in rat pineal gland, correlation with stimulation of adenylate cyclase, 714
- Altshuler, H. L., Killam, E. K. and Killam, K. F.: Biogenic amines and the photomyoclonic syndrome in the baboon, *papio papio*, 156
- p*-Aminohippurate, organic anion, transport by choroid plexus, 771
- Aminopyrine, demethylation in rat, measured by CO_2 exhalation, 501
- d*-Amphetamine, effects on schedule-controlled behavior in mouse, 616
- Analgesic effect, of morphine, relationship to brain levels, 637
- Anesthesia, halothane, effects on biodisposition of ketamine in rats, 545
- Anesthetics, local
amide-linked, effects on adrenergic neuroeffector junction in cutaneous veins of dog, 723
effects, computer simulation using mathematical model of myelinated nerve, 737
- Angina pectoris, experimental model, nitroglycerin and dipyridamole on cardiac metabolism and dynamics in, 15
- Angiotensin, influence of prostaglandins E, A and F on vasoconstrictor responses in feline kidney to, 44
- Anions
movements into posterior chamber of dog eye, effect of acetazolamide, 510
organic, transport by choroid plexus, 771
- Antiarrhythmic properties, of UM-424, 420
- Anticoagulant response, to warfarin in rats, influence of fasting and stress, 194
- Anticonvulsant properties, metabolism, distribution and, of N,N'-dimethoxymethyl phenobarbital in rat, 180
- Anti-inflammatory drugs, nonsteroidal, inhibition of prostaglandin synthetase systems of rabbit tissues by, 226
- Antinociceptive effects, of lanthanum and cerium in nontolerant and morphine tolerant-dependent animals, 288
- Antonaccio, M. J. and Kerwin, L.: Centrally mediated increased reflex vagal bradycardia after L-dopa in monoamine oxidase-inhibited anesthetized dogs, 380
- Aorta, strips, from hypertensive rats, decreased relaxation in, 396
- Apomorphine, sensitivity of rats to, changes

- during morphine dependence and withdrawal, 637
- Appel, J. B., *see* Kuhn, D. M., 121
- Arrhythmias, ventricular, in experimental myocardial infarction, effects of disopyramide phosphate, 665
- Ary, M., *see* Cox, B., 637
- Aspirin, inhibition of prostaglandin synthetase systems of rabbit tissues by, 226
- Atropine, action on end-plate current of frog sartorius muscle, 360
- Automaticity, electrically induced, in ventricular myocardium of guinea pig, effects of quinidine and verapamil, 407
- Axelrod, J., *see* Zatz, M., 714
- Axon, membranes, squid, mechanism of action of quinidine on, 62
- Azotemia, experimental, in dog, effect on renal clearance of furosemide, 238
- Baboon, (*Papio papio*), biogenic amines and photomyoclonic syndrome in, 156
- Barbiturate(s)
- blockade of calcium uptake in stimulated and potassium-depolarized rat sympathetic ganglia by, 80
 - induced narcosis, potentiation by procarbazine, 586
- Barlow, T. S., *see* Cott, J. M., 594
- Barrett, J. E.: Effects of alcohol, chlordiazepoxide, cocaine and pentobarbital on responding maintained under fixed-interval schedules of food or shock presentation, 605
- Batrachotoxin, effects on cat papillary muscle, 433
- Baumel, I. P., Gallagher, B. B., Dimicco, J. and Dionne, R.: Metabolism, distribution and anticonvulsant properties of N,N'-dimethoxymethyl-phenobarbital in the rat, 180
- Beckner, J. S., *see* Martin, B. R., 128
- Behavior
- in squirrel monkey and pigeon, effects of morphine, naloxone and nalorphine, 625
 - maintained under fixed-interval schedules of food or shock presentation, effects of alcohol, chlordiazepoxide, cocaine and pentobarbital, 605
 - schedule-controlled, in mouse, effects of phencyclidine, ketamine, *d*-amphetamine and pentobarbital, 616
 - schedule-controlled, in pigeon, effect of phencyclidine and ketamine, 172
- Bell, J. A., Martin, W. R., Sloan, J. W. and Buchwald, W. F.: The effect of L-tryptophan on spinal cord C-fiber reflexes, 373
- Benzoic acid derivatives, evaluation as iron-chelating agents, 478
- Benzomorphans, opiate receptor interactions in rat brain homogenates of, 316
- 3,4-Benzpyrene, biliary excretion in nafenopin-treated rats of, 486
- Berkowitz, B. A., *see* Cohen, M. L., 396
- Bertilsson, L., *see* Neckers, L. M., 333
- Bicarbonate ion, movement into posterior chamber of dog eye, effect of acetazolamide, 510
- Bile, excretion of 3,4-benzpyrene in nafenopin-treated rats in, 486
- Biogenic amines, effect on photomyoclonic syndrome in baboon, 156
- Bircher, J., *see* Lauterburg, B. H., 501
- Bishydroxycoumarin, influence of fasting and stress on response of rats to, 194
- Bladder, urinary, toad, effect of ethanol on water permeability and short-circuit current and response to vasopressin, adenosine 3',5'-monophosphate and theophylline of, 231
- Blaustein, M. P.: Barbiturates block calcium uptake by stimulated and potassium-depolarized rat sympathetic ganglia, 80
- Blood pressure, arterial, central effects of *beta* adrenergic blocking agents on, 389
- Blood vessels
- cutaneous veins, dog, effects of amide-linked local anesthetics on adrenergic neuroeffector junction in, 723
 - decreased relaxation in hypertension, 396
- Bognacki, J., *see* Levine, W. G., 486
- Bowman, E. R., *see* Wilson, K. L., Jr., 685
- Boykin, M. E. and Doctor, B. P.: Studies on the binding of 5,5-diphenylhydantoin to nucleic acids *in vitro* and to rat brain subcellular fractions *in vitro* and *in vivo*, 469
- Brady, T., *see* Condouris, G. A., 737
- Bradycardia, reflex vagal, increased, after L-dopa in monoamine oxidase-inhibited anesthetized dogs, 380
- Brain
- cerebral cortex, rat, noradrenergic sub- and supersensitivity after reserpine, 167
 - homogenates, rat, opiate receptor interactions of benzomorphans in, 316
 - levels of morphine, relationship to analgesic effect, 637
 - nuclei, rat, reduction of tryptophan hydroxylase activity and 5-hydroxytryptamine concentration after *p*-chloroamphetamine in, 333
 - rat, [³]cocaine in, 556
 - rat, levels of [allyl-1',3'-¹⁴C]naloxone in, comparison with nalorphine, 257
 - slices, rat, effects of tetrahydrocannabinols on ³H-acetylcholine biosynthesis in, 339
 - subcellular fractions, rat, binding *in vitro* and *in vivo* of 5,5-diphenylhydantoin to, 469
 - tolerant and nontolerant dogs, tissue and subcellular distribution of ³H- Δ^9 -tetrahydrocannabinol in, 128
- Breese, G. R., *see* Cott, J. M., 594

- Briggs, W. A., *see* Lowenthal, D. T., 570
 Brodeur, J., *see* Laliberté, R., 194
 Brody, M. J., *see* Powell, J. R., 1
 Bruckner, J. V., *see* Traiger, G. J., 493
 Buchwald, W. F., *see* Bell, J. A., 373
 2-Butanol, -induced potentiation of carbon tetrachloride hepatotoxicity, participation of 2-butanone in, 493
 2-Butanone, participation in 2-butanol-induced potentiation of carbon tetrachloride hepatotoxicity, 493
- Calcium, uptake in stimulated and potassium-depolarized rat sympathetic ganglia, blockade by barbiturates, 80
 Carbon dioxide, exhalation, used to measure aminopyrine demethylation in rat, 501
 Carbon tetrachloride, hepatotoxicity, induced by 2-butanol, participation of 2-butanone in, 493
 Cardiotoxin, cobra, action in skeletal muscle, 758
 Cardiovascular effects, sympathetic, of strychnine poisoning in dogs, 29
 Cardiovascular properties, of UM-424, 420
 Cardiovascular system, identification and specific blockade of two receptors for histamine in, 1
 Cat(s)
 central effect of *beta* adrenergic blocking agents on arterial blood pressure in, 389
 central neurons, effects of opiate agonists and antagonists on, 107
 effect of L-tryptophan on spinal cord C-fiber reflexes of, 373
 identification and specific blockade of two receptors for histamine in cardiovascular system of, 1
 kidney, influence of prostaglandins E, A and F on vasoconstrictor responses to norepinephrine, renal nerve stimulation and angiotensin in, 44
 nictitating membrane, pretreated with reserpine, involvement of transmitter different from norepinephrine in residual responses to nerve stimulation of, 697
 papillary muscle, effects of batrachotoxin on, 433
 spinal cord segmental reflexes, actions of methoxamine and tryptamine and their interactions with cyproheptadine and phenoxybenzamine on, 87
 Cations, organic, transport by choroid plexus, 771
 Central nervous system, (*see* Nervous system, central)
 Cerami, A., *see* Grady, R. W., 478
 Cerium, antinociceptive effects in nontolerant and morphine tolerant-dependent animals, 288
 Chakrabarti, S., *see* Laliberté, R., 194
 Chan, W. Y.: An investigation of the natriuretic, antidiuretic and oxytocic actions of neurohypophysial hormones and related peptides: Delineation of separate mechanisms of action and assessment of molecular requirements, 746
 Chang, R. S. L., *see* Wilson, K. L., Jr., 685
 Chapnick, B. M., Paustian, P. W., Klainer, E., Joiner, P. D., Hyman, A. L. and Kadowitz, P. J.: Influence of prostaglandins E, A and F on vasoconstrictor responses to norepinephrine, renal nerve stimulation and angiotensin in the feline kidney, 44
 Cheney, D. L., *see* Racagni, G., 323
 Chick, embryo heart, sinoatrial pacemaker, onset of chronotropic effects of nicotinic drugs and tyramine related to development of autonomic neuroeffector transmission, 676
 Chicken, skeletal muscle, action of cobra cardiotoxin in, 758
 Chlordiazepoxide, effects on responding maintained under fixed-interval schedules of food or shock presentation, 605
 Chloride ion, movement into posterior chamber of dog eye, effect of acetazolamide, 510
p-Chloroamphetamine, reduction of tryptophan hydroxylase activity and 5-hydroxytryptamine concentration in certain rat brain nuclei after, 333
 Chlorothiazide, effects on lithium reabsorption in rat, 188
 Choroid plexus, transport of organic actions and anions by, 771
 Chronotropic effects, of nicotinic drugs and tyramine on sinoatrial pacemaker in chick embryo heart, onset related to development of autonomic neuroeffector transmission, 676
 Cicero, T. J., *see* Hipps, P. P., 642
 Clozapine, *in vivo* actions on turnover rate of acetylcholine in rat striatum, 323
 Cobra, cardiotoxin, action in skeletal muscle, 758
 [³H]Cocaine
 disposition and biotransformation in acutely and chronically treated rats, 556
 effects on responding maintained under fixed-interval schedules of food or shock presentation, 605
 Computer simulation, of local anesthetic effects using mathematical model of myelinated nerve, 737
 Cochin, J., *see* Mushlin, B. E., 280
 Cohen, M. L. and Berkowitz, B. A.: Decreased vascular relaxation in hypertension, 396
 Condouris, G. A., Goebel, R. H. and Brady, T.: Computer simulation of local anesthetic effects using a mathematical model of myelinated nerve, 737
 Cooper, B. R., *see* Cott, J. M., 594
 Costa, E., *see* Racagni, G., 323

- Cott, J. M., Breese, G. R., Cooper, B. R., Barlow, T. S. and Prange, A. J., Jr.: Investigations into the mechanism of reduction of ethanol sleep by thyrotropin-releasing hormone (TRH), 594
- Counsell, R. E., *see* Kniffen, F. J., 420
- Cox, B., Ary, M. and Lomax, P.: Changes in sensitivity to apomorphine during morphine dependence and withdrawal in rats, 637
- Csik, V., *see* Szekeres, L., 15
- Cyclazocine, effects on avoidance behavior of squirrel monkey, 145
- Cyclic nucleotides, decreased vascular relaxation in hypertensive rats to, 396
- Cyproheptadine, interactions with actions of methoxamine and tryptamine on cat spinal cord segmental reflexes, 87
- Daly, J. W., *see* Shatzberger, G. S., 433
- Daniell, H. B., St. Pierre, A. J. and Webb, J. G.: A positive inotropic effect of propranolol on the canine myocardium: A presynaptic effect, 657
- Davies, J., *see* Duggan, A. W., 107
- Deoxycorticosterone, effect of prolonged lithium ingestion on response in rats to, 463
- Deoxyribonucleic acid, binding *in vitro* of 5,5-diphenylhydantoin to, 469
- Dependence, on morphine in rats, sensitivity to apomorphine during, 637
- Dewey, W. L.
see Adams, M. D., 649
see Martin, B. R., 128
- Dews, P. B., *see* Wenger, G. R., 616
- Dextrorphan, effects on cat central neurons, 107
- Diazepam, influence on sympathetic cardiovascular effects of strychnine poisoning in dogs, 29
- N,N'-Dimethoxymethyl phenobarbital, metabolism, distribution and anticonvulsant properties in rat, 180
- 1-Dimethyl isopropylamino-3-(2-phenylphenoxy)propan-2-ol chloride (*see* UM-424)
- Dimethylphenylpiperazinium, chronotropic effects on sinoatrial pacemaker in chick embryo heart, onset related to development of autonomic neuroeffector transmission, 676
- Dimicco, J., *see* Baumel, I. P., 180
- Dingledine, R. and Goldstein, A.: Effect of synaptic transmission blockade on morphine action in the guinea-pig myenteric plexus, 97
- Dionne, R., *see* Baumel, I. P., 180
- Diphenylhydantoin, binding, enhancement by lipid extraction, 579
- 5,5-Diphenylhydantoin, binding to nucleic acids *in vitro* and to rat brain subcellular fractions *in vitro* and *in vivo*, 469
- Dipyridamole, on cardiac metabolism and dynamics in new experimental model of angina pectoris, 15
- Disopyramide phosphate, effects on ventricular arrhythmias in experimental myocardial infarction, 665
- Diuretics
(*see also* specific name)
effects on lithium reabsorption in rat, 188
- Doctor, B. P., *see* Boykin, M.E., 469
- Dog(s)
anesthetized, monoamine oxidase-inhibited, centrally mediated increased reflex vagal bradycardia after L-dopa in, 380
antiarrhythmic and cardiovascular properties of UM-424 in, 420
cutaneous veins, effects of amide-linked local anesthetics on adrenergic neuroeffector junction in, 723
effect of adenosine on myocardial oxygen balance in, 445
effect of experimental azotemia on renal clearance of furosemide in, 238
effects of disopyramide phosphate on ventricular arrhythmias in experimental myocardial infarction in, 665
experimental model of angina pectoris in, effects of nitroglycerin and dipyridamole, 15
eye, posterior chamber, effect of acetazolamide on movement of anions into, 510
identification and specific blockade of two receptors for histamine in cardiovascular system of, 1
myocardium, positive inotropic effect of propranolol on, 657
spleen, distribution and properties of adrenergic storage vesicles in, 346
sympathetic cardiovascular effects of strychnine poisoning in, 29
tolerant and nontolerant, distribution of $^3\text{H}-\Delta^9$ -tetrahydrocannabinol on central nervous system and peripheral organs of, 128
- L-Dopa
effect on photomyoclonic syndrome in baboon, 156
increased reflex vagal bradycardia in monoamine oxidase-inhibited anesthetized dogs after, 380
- Dopamine, effect on photomyoclonic syndrome in baboon, 156
- Douglas, J. R., Jr., Johnson, E. M., Jr., Heist, J. F., Marshall, G. R. and Needleman, P.: Is the peripheral sympatho-adrenal nervous system necessary for renal hypertension? 35
- Downs, D. A. and Woods, J. H.: Morphine, pentazocine and naloxone effects on responding under a multiple schedule of reinforcement in rhesus monkeys and pigeons, 298
- Dudgeon, K. L., *see* Steele, T. H., 188

- Duggan, A. W., Davies, J. and Hall, J. G.: Effects of opiate agonists and antagonists on central neurons of the cat, 107
- Earnhardt, J. T., *see* Adams, M. D., 649
- Ellipticine, -induced hemolysis, mechanism, 525
- End-plate current, of frog sartorius muscle, action of atropine and scopolamine on, 360
- Enzymes, hepatic, rat, induction by methaqualone, 204
- Epinephrine
effect on photomyoclonic syndrome in baboon, 156
influence on response of rats to warfarin, 194
- Ethanol
effect on water permeability and short-circuit current of toad urinary bladder and the response to vasopressin, adenosine 3',5'-monophosphate and theophylline, 231
-induced sleep, reduction by thyrotropin-releasing hormone, 594
- Etidocaine, effects on adrenergic neuroeffector junction in cutaneous veins of dog, 723
- Etonitazene, oral ingestion by rats, 269
- Eveland, M. R., *see* Hipps, P. P., 642
- Eye, posterior chamber, dog, effect of acetazolamide on movement of anions into, 510
- Fasting, influence on response of rats to warfarin, 194
- Fix, T., *see* McMillan, D. E., 269
- Flufenamic acid, inhibition of prostaglandin synthetase systems of rabbit tissue by, 226
- French, S. W., *see* Palmer, D. S., 167
- Friedman, E., Hanin, I. and Gershon, S.: Effect of tetrahydrocannabinols on ³H-acetylcholine biosynthesis in various rat brain slices, 339
- Frog, sartorius muscle, action of atropine and scopolamine on end-plate current of, 360
- Furosemide
effects on lithium reabsorption in rat, 188
renal clearance in dog, effect of experimental azotemia, 238
- Gallagher, B. B., *see* Baumel, I. P., 180
- Ganglia, sympathetic, rat, stimulated and potassium-depolarized, blockade by barbiturates of calcium uptake in, 80
- Ganglion, superior cervical, distribution and properties of adrenergic storage vesicles in, 346
- Gardiner, T. H. and Schanker, L. S.: Active transport of phenol red by rat lung slices, 455
- Garg, L. C., *see* Zimmerman, T. J., 510
- Gerbils, reduction of ethanol-induced sleep by thyrotropin-releasing hormone in, 594
- Gershon, S., *see* Friedman, E., 339
- Goebel, R. H., *see* Condouris, G. A., 737
- Goldberg, D. M., *see* Goldberg, S. R., 625
- Goldberg, M. A. and Todoroff, T.: Enhancement of diphenylhydantoin binding by lipid extraction, 579
- Goldberg, S. R., Morse, W. H. and Goldberg, D. M.: Some behavioral effects of morphine, naloxone and nalorphine in the squirrel monkey and the pigeon, 625
- Goldstein, A., *see* Dingledine, R., 97
- Gorodetsky, C. W., *see* Yeh, S. Y., 249
- Grady, R. W., Graziano, J. H., Akers, H. A. and Cerami, A.: The development of new iron-chelating drugs, 478
- Grant, A. O. and Katzung, B. G.: The effects of quinidine and verapamil on electrically induced automaticity in the ventricular myocardium of guinea pig, 407
- Graziano, J. H., *see* Grady, R. W., 478
- Greenberg, I., *see* Kuhn, D. M., 121
- Grell, R., *see* Mushlin, B. E., 280
- Gross, G. J., Warltier, D. C. and Hardman, H. F.: Effect of adenosine on myocardial oxygen balance, 445
- Guanethidine, evaluation of permanent sympathectomy in adult rats produced by, 53
- Guinea pig(s)
myenteric plexus, effect of synaptic transmission blockade on morphine action in, 97
reduction of ethanol-induced sleep by thyrotropin-releasing hormone in, 594
small intestine, effects of nicotine on rebound excitation of, 71
ventricular myocardium, effects of quinidine and verapamil on electrically induced automaticity of, 407
- Hall, J. G., *see* Duggan, A. W., 107
- Haloperidol, *in vivo* actions on turnover rate of acetylcholine in rat striatum, 323
- Halothane, anesthesia in rats, effects on biodeposition of ketamine, 545
- Hamsters, reduction of ethanol-induced sleep by thyrotropin-releasing hormone in, 594
- Hanin, I., *see* Friedman, E., 339
- Hardman, H. F., *see* Gross, G. J., 445
- Harris, L. S.
see Adams, M. D., 649
see Martin, B. R., 128
- Harris, R. A., Loh, H. H. and Way, E. L.: Antinociceptive effects of lanthanum and cerium in nontolerant and morphine tolerant-dependent animals, 288
- Harvey, J. A., *see* Yunger, L. M., 307
- Heart
chick embryo, sinoatrial pacemaker, onset of chronotropic effects of nicotinic drugs and

- tyramine related to development of autonomic neuroeffector transmission, 676
- hemodynamic, metabolic and electrophysiological alterations due to angina pectoris, effects of nitroglycerin and dipyridamole on, 15
- rat, distribution and properties of adrenergic storage vesicles in, 346
- tolerant and nontolerant dogs, tissue distribution of ^3H - Δ^9 -tetrahydrocannabinol in, 128
- Heist, J. F., *see* Douglas, J. R., Jr., 35
- Hemolysis, ellipticine-induced, mechanism, 525
- Hepatotoxicity, carbon tetrachloride, 2-butanol-induced potentiation of, 493
- Herzeg, T., *see* Mathur, P. P., 204
- Heroin, urinary excretion in man, 249
- Hipps, P. P., Eveland, M. R., Meyer, E. R., Sherman, W. R. and Cicero, T. J.: Mass fragmentography of morphine: Relationship between brain levels and analgesic activity, 642
- Histamine
receptors in cardiovascular system for, identification and specific blockade of, 1
- Holtzman, S. G.: Effects of morphine and narcotic antagonists on avoidance behavior of the squirrel monkey, 145
- Huang, M. C., *see* Lin Shiau, S. Y., 758
- Hydroxamic acids, evaluation as iron-chelating agents, 478
- 5-Hydroxytryptamine, reduction in certain rat brain nuclei after *p*-chloroamphetamine, 333
- L-5-Hydroxytryptophan, behavioral effects after destruction of ascending serotonergic pathways in rat, role of catecholaminergic neurons, 307
- Hyman, A. L., *see* Chapnick, B. M., 44
- Hypertension
decreased vascular relaxation in, 396
renal, role of peripheral sympatho-adrenal nervous system in, 35
- Hypoprotrombinemia, warfarin-induced, effect of induction of hepatic enzymes by methaqualone on, 204
- Hypothermia, induced by ethanol, reduction by thyrotropin-releasing hormone, 594
- Indomethacin, inhibition of prostaglandin synthetase systems of rabbit tissues by, 226
- Infarction, myocardial, experimental, effects of disopyramide phosphate on ventricular arrhythmias in, 665
- Iron, -chelating drugs, evaluation, 478
- Isoproterenol, decreased vascular relaxation in hypertensive rats to, 396
- Jackson, M. H., *see* Wood, J. D., 71
- Jensen, J., *see* Thomsen, K., 463
- Johnson, E. M., Jr., *see* Douglas, J. R., Jr., 35
- Johnson, E. M., Jr. and O'Brien, F.: Evaluation of the permanent sympathectomy produced by the administration of guanethidine to adult rats, 53
- Joiner, P. D., *see* Chapnick, B. M., 44
- Kadowitz, P. J., *see* Chapnick, B. M., 44
- Katzung, B. G., *see* Grant, A. O., 407
- Kawashima, K., Levy, A. and Spector, S.: Stereospecific radioimmunoassay for propranolol isomers, 517
- Kebabian, J. W., *see* Zatz, M., 714
- Kelly, R., *see* Klevans, L. R., 389
- Kerwin, L., *see* Antonaccio, M. J., 380
- Ketamine
biodisposition in rat, 536
biodisposition in rats, effects of halothane anesthesia, 545
effects on schedule-controlled behavior in mouse, 616
effect on schedule-controlled behavior in pigeon, 172
- Kidney
dog, clearance of furosemide, effect of experimental azotemia, 238
feline, influence of prostaglandins E, A and F on vasoconstrictor responses to norepinephrine, renal nerve stimulation and angiotensin in, 44
hypertension, role of peripheral sympatho-adrenal nervous system in, 35
role in elimination of acetaminophen, 570
tolerant and nontolerant dogs, tissue distribution of ^3H - Δ^9 -tetrahydrocannabinol in, 128
- Killam, E. K., *see* Altshuler, H. L., 156
- Killam, K. F., *see* Altshuler, H. L., 156
- Klainer, E., *see* Chapnick, B. M., 44
- Klevans, L. R., Kovacs, J. L. and Kelly, R.: Central effect of *beta* adrenergic blocking agents on arterial blood pressure, 389
- Kniffen, F. J., Winokur, S., Counsell, R. E. and Lucchesi, B. R.: The antiarrhythmic and cardiovascular properties of 1-dimethyl isopropylamino-3-(2-phenylphenoxy)-propan-2-ol chloride, UM-424, 420
- Koslow, S. H., *see* Neckers, L. M., 333
- Kovacs, J. L., *see* Klevans, L. R., 389
- Kuhn, D. M., Greenberg, I. and Appel, J. B.: Stimulus properties of the narcotic antagonist pentazocine: Similarity to morphine and antagonism by naloxone, 121
- Kus, T. and Sasyniuk, B. I.: Effects of disopyramide phosphate on ventricular arrhythmias in experimental myocardial infarction, 665
- Laliberté, R., Chakrabarti, S. and Brodeur, J.: The influence of fasting and stress on the response of rats to warfarin, 194
- Langer, S. Z. and Pinto, J. E. B.: Possible involve-

- ment of a transmitter different from norepinephrine in the residual responses to nerve stimulation of the cat nictitating membrane after pretreatment with reserpine, 697
- Lanthanum, antinociceptive effects in nontolerant and morphine tolerant-dependent animals, 288
- Larmore, C. K., *see* Steele, T. H., 188
- Lauterburg, B. H. and Bircher, J.: Expiratory measurement of maximal aminopyrine demethylation *in vivo*: Effect of phenobarbital, partial hepatectomy, portacaval shunt and bile duct ligation in the rat, 501
- Leander, J. D., *see* McMillan, D. E., 269
- Lee, C. Y., *see* Lin Shiau, S. Y., 758
- Lee, I. P.: A possible mechanism of ellipticine-induced hemolysis, 525
- Lee, I. P. and Lucier, G. W.: The potentiation of barbiturate-induced narcosis by procarbazine, 586
- Lefkowitz, R. J., *see* Zatz, M., 714
- 4-Leucine analogs, natriuretic, antidiuretic and oxytocic effects of, 746
- Levallorphan, effects on cat central neurons, 107
- Levine, L., *see* Pong, S., 226
- Levine, W. G. and Bognacki, J.: Biliary excretion of 3,4-benzpyrene in nafenopin-treated rats, 486
- Levorphanol
effects on cat central neurons, 107
oral ingestion by rats, 269
- Levy, A., *see* Kawashima, K., 517
- Levy, G., *see* Lowenthal, D. T., 570
- Lidocaine
computer simulation of effects using mathematical model of myelinated nerve, 737
effects on adrenergic neuroeffector junction in cutaneous veins of dog, 723
- Lin Shiau, S. Y., Huang, M. C. and Lee, C. Y.: Mechanism of action of cobra cardiotoxin in the skeletal muscle, 758
- Lipid, extraction, enhancement of diphenylhydantoin binding by, 579
- Lithium
prolonged ingestion of, effect on response to mineralocorticoids in rats, 463
reabsorption in rat, pharmacological characterization, 188
- Liver
enzymes, rat, induction by methaqualone, 204
tolerant and nontolerant dogs, tissue distribution of $^3\text{H}-\Delta^9$ -tetrahydrocannabinol in, 128
microsomal system, rat, theophylline metabolism by, 213
- Loh, H. H., *see* Harris, R. A., 288
- Lohmann, S. M. and Miech, R. P.: Theophylline metabolism by the rat liver microsomal system, 213
- Lomax, P., *see* Cox, B., 637
- Lowenthal, D. T., Øie, S., van Stone, J. C., Briggs, W. A. and Levy, G.: Pharmacokinetics of acetaminophen elimination by anephric patients, 570
- Lucchesi, B. R., *see* Kniffen, F. J., 420
- Lucier, G. W., *see* Lee, I. P., 586
- Lung, slices, rat, active transport of phenol fed by, 455
- Lysine-vasopressin, analogs, renal effects of, 746
- Man
anephric, pharmacokinetics of acetaminophen elimination by, 570
red blood cells, mechanism of ellipticine-induced hemolysis in, 525
urinary excretion of heroin and metabolites in, 249
- Maren, T. H., *see* Zimmerman, T. J., 510
- Marietta, M. P., *see* White, P. F., 545
- Marietta, M. P., White, P. F., Pudwill, C. R., Way, W. L. and Trevor, A. J.: Biodisposition of ketamine in the rat: Self-induction of metabolism, 536
- Marshall, G. R., *see* Douglas, J. R., Jr., 35
- Martin, B. R., Dewey, W. L., Harris, L. S. and Beckner, J. S.: $^3\text{H}-\Delta^9$ -tetrahydrocannabinol tissue and subcellular distribution in the central nervous system and tissue distribution in peripheral organs of tolerant and nontolerant dogs, 128
- Martin, W. R.
see Bell, J. A., 373
see Vaupel, D. B., 87
- Mass fragmentography, of morphine, to determine relationship between brain levels and analgesic effect, 637
- Mathur, P. P., Smyth, R. D., Herczeg, T. and Reavey-Cantwell, N. H.: Induction of hepatic enzymes by methaqualone and effect on warfarin-induced hypoprothrombinemia, 204
- McKennis, H., Jr., *see* Wilson, K. L., Jr., 685
- McMillan, D. E., Leander, J. D., Wilson, T. W., Wallace, S. C., Fix, T., Redding, S. and Turk, R. T.: Oral ingestion of narcotic analgesics by rats, 269
- McNay, J. L., *see* Rose, H. J., 238
- McQuinn, R. L., *see* Yeh, S. Y., 249
- May, E. L., *see* Pert, C. B., 316
- Meek, J. L., *see* Neckers, L. M., 333
- Meier, K. E. and Mendoza, S. A.: Effect of ethanol on the water permeability and short-circuit current of the urinary bladder of the toad and the response to vasopressin, adenosine-3',5'-monophosphate, 231
- Mendoza, S. A., *see* Meier, K. E., 231
- Meperidine, oral ingestion by rats, 269
- Metabolism

- distribution, anticonvulsant properties and, of *N,N'*-dimethoxymethyl phenobarbital in rat, 180
- of alcohol, role in 2-butanol-induced potentiation of carbon tetrachloride hepatotoxicity, 493
- of 3,4-benzpyrene in nafenopin-treated rats, 486
- of [³H]cocaine in acutely and chronically treated rats, 556
- of ketamine in rat, 536
- of ketamine in rats, effects of halothane anesthesia, 545
- of [allyl-1',3'-¹⁴C]naloxone in rat, comparison with nalorphine, 257
- of theophylline by rat liver microsomal system, 213
- Metabolites, of heroin, urinary excretion in man, 249
- Metanicotine, *cis*- and *trans*-, nicotine-like actions of, 685
- Methadone, oral ingestion by rats, 269
- Methaqualone, induction of hepatic enzymes by, comparison with phenobarbital, 204
- Methoxamine, actions on cat spinal cord segmental reflexes and its interactions with cyproheptadine and phenoxybenzamine, 87
- N*¹-Methylnicotinamide, organic cation, transport by choroid plexus, 771
- Meyer, E. R., *see* Hipps, P. P., 642
- Mice
- nontolerant and morphine tolerant-dependent, antinociceptive effects of lanthanum and cerium in, 288
 - potentiation of barbiturate-induced narcosis by procarbazine in, 586
 - reduction of ethanol-induced sleep by thyrotropin-releasing hormone in, 594
- Microsomal system, rat liver, theophylline metabolism by, 213
- Miech, R. P., *see* Lohmann, S. M., 213
- Miller, T. B. and Ross, C. R.: Transport of organic cations and anions by choroid plexus, 771
- Mineralocorticoids, effect of prolonged lithium ingestion on response in rats to, 463
- Misra, A. L., *see* Nayak, P. K., 556
- Misra, A. L., Pontani, R. B., Vadlamani, N. L. and Mulé, S. J.: Physiological disposition and biotransformation of [allyl-1',3'-¹⁴C]naloxone in the rat and some comparative observations on nalorphine, 257
- Molinoff, P. B., *see* Nelson, D. L., 346
- Monkey(s)
- rhesus, effects of morphine, pentazocine and naloxone on responding under multiple schedule of reinforcement in, 298
 - rhesus, mechanism of ellipticine-induced hemolysis in, 525
 - squirrel, behavioral effects of morphine, naloxone and nalorphine in, 625
 - squirrel, effects of alcohol, chlordiazepoxide, cocaine and pentobarbital on responding, maintained under fixed-interval schedules of food or shock presentation in, 605
 - squirrel, effects of morphine and narcotic antagonists on avoidance behavior of, 145
- Monoamine oxidase, -inhibited, anesthetized dogs, increased reflex vagal bradycardia after L-dopa in, 380
- Morphine
- action in guinea-pig myenteric plexus, effects of synaptic transmission blockade on, 97
 - behavioral effects in squirrel monkey and pigeon, 625
 - dependence and withdrawal in rats, changes in sensitivity to apomorphine during, 637
 - effects on avoidance behavior of squirrel monkey, 145
 - effects on cat central neurons, 107
 - effects on responding under multiple schedule of reinforcement in rhesus monkeys and pigeons, 298
 - mass fragmentography, relationship between brain levels and analgesic activity, 637
 - oral ingestion by rats, 269
 - role of interval between doses on development of tolerance to, 280
 - similarity of pentazocine to, 121
 - tolerant-dependent animals, antinociceptive effects of lanthanum and cerium in, 288
- Morse, W. H., *see* Goldberg, S. R., 625
- Mouse, effects of phencyclidine, ketamine, *d*-amphetamine and pentobarbital on schedule-controlled behavior in, 616
- Muldoon, S. M., Verbeuren, T. J. and Vanhoutte, P. M.: Effects of amide-linked local anesthetics on adrenergic neuroeffector junction in cutaneous veins of dog, 723
- Mulé, S. J.
- see* Misra, A. L., 257
 - see* Nayak, P. K., 556
- Muscle
- intestinal, guinea pig, effects of nicotine on rebound excitation of, 71
 - papillary, cat, effects of batrachotoxin on, 433
 - sartorius, frog, action of atropine and scopolamine on end-plate current of, 360
 - skeletal, action of cobra cardiotoxin in, 758
- Mushlin, B. E., Grell, R. and Cochin, J.: Studies on tolerance. I. The role of the interval between doses on the development of tolerance to morphine, 280
- Myenteric plexus, guinea pig, effect of synaptic

- transmission blockade on morphine action in, 97
- Myocardium
 canine, positive inotropic effect of propranolol on, 657
 guinea pig, effects of adenosine on, 445
 oxygen, effects of quinidine and ventricular fibrillation on electrically induced automaticity of, 407
- Nafepin, -treated rats, biliary excretion of 3,4-benzopyrene in, 486
- Nalorphine
 behavioral effects in squirrel monkey and pigeon, 625
 disposition and biotransformation in rat, comparison with naloxone, 237
 effects on avoidance behavior of squirrel monkey, 145
 effects on cat central neurons, 107
- Naloxone
 behavioral effects in squirrel monkey and pigeon, 625
 effects on cat central neurons, 107
 effects on responding under multiple schedule of reinforcement in rhesus monkeys and pigeons, 298
 influence on discriminative effects of pentazocine and morphine, 121
 -precipitated withdrawal from morphine in rats, sensitivity to apomorphine during, 637
- ³H-Naloxone, binding in presence and absence of sodium, used to predict pharmacological properties of benzomorphans, 316
- [Allyl-1',3'-¹⁴C]Naloxone, disposition and biotransformation in rat and comparison with nalorphine, 257
- Narahashi, T., *see* Yeh, J. Z., 62
- Narcosis, barbiturate-induced, potentiation by procarbazine, 586
- Narod, M. E., *see* Palmer, D. S., 167
- Natriuretic actions, of neurohypophysial hormones and related peptides, 746
- Nayak, P. K., Misra, A. L. and Mulé, S. J.: Physiological disposition and biotransformation of [³H]cocaine in acutely and chronically treated rats, 556
- Neckers, L. M., Bertilsson, L., Koslow, S. H. and Meek, J. L.: Reduction of tryptophan hydroxylase activity and 5-hydroxytryptamine concentration in certain rat brain nuclei after *p*-chloroamphetamine, 333
- Needleman, P., *see* Douglas, J. R., Jr., 35
- Nelson, D. L. and Molinoff, P. B.: Distribution and properties of adrenergic storage vesicles in nerve terminals, 346
- Nerve
 myelinated, mathematical model, computer simulation of local anesthetic effects using, 737
 renal, stimulation, influence of prostaglandins E, A and F on vasoconstrictor responses in feline kidney to, 44
- Nerve stimulation, residual responses of reserpine-pretreated cat nictitating membrane to, involvement of transmitter different from norepinephrine, 697
- Nerve terminals, distribution and properties of adrenergic storage vesicles in, 346
- Nervous system
 central, of tolerant and nontolerant dogs, tissue and subcellular distribution of ³H- Δ^9 -tetrahydrocannabinol in, 128
 peripheral sympathetic, rat, permanent destruction by guanethidine, 53
 peripheral sympatho-adrenal, role in renal hypertension, 35
- Neurohypophysial hormones, natriuretic, anti-diuretic and oxytocic actions of, 746
- Neurons
 catecholaminergic, role in behavioral effects of L-5-hydroxytryptophan after destruction of ascending serotonergic pathways in rat, 307
 central, cat, effects of opiate agonists and antagonists on, 107
- Nicotine
 chronotropic effects on sinoatrial pacemaker in chick embryo heart, onset related to development of autonomic neuroeffector transmission, 676
 effects on rebound excitation of guinea-pig small intestine, 71
 -like actions of *cis*- and *trans*-metanicotine, 685
- Nicotinic drugs, chronotropic effects on sinoatrial pacemaker in chick embryo heart, onset related to development of autonomic transmission, 676
- Nictitating membrane, cat, pretreated with reserpine, involvement of transmitter different from norepinephrine in residual responses to nerve stimulation of, 697
- Nitroglycerin
 decreased vascular relaxation in hypertensive rats to, 396
 on cardiac metabolism and dynamics in new experimental model of angina pectoris, 15
- Norepinephrine
 actions on cat spinal cord segmental reflexes, 87
 effect on photomyoclonic syndrome in baboon, 156
 influence of prostaglandins E, A and F on vasoconstrictor responses in feline kidney to, 44
 sub- and supersensitivity of cerebral cortex after reserpine to, 167

- Nucleic acids, binding *in vitro* of 5,5-diphenylhydantoin to, 469
- O'Brien, F., *see* Johnson, E. M., Jr., 53
- Odusote, K. A., *see* Sofola, O. A., 29
- Øie, S., *see* Lowenthal, D. T., 570
- Olesen, O. V., *see* Thomsen, K., 463
- Opiate receptor, interactions of benzomorphans in rat brain homogenates, 316
- Opiates
 action in guinea-pig myenteric plexus, effect of synaptic transmission blockade on, 97
 agonists and antagonists, effects on cat central neurons, 107
- Opioids, oral ingestion by rats, 269
- Oxygen, balance, myocardial, effect of adenosine on, 445
- Oxytocin, analogs, renal effects of, 746
- Palmer, D. S., French, S. W. and Narod, M. E.: Noradrenergic subsensitivity and supersensitivity of the cerebral cortex after reserpine treatment, 167
- Pancreas, tolerant and nontolerant dogs, tissue distribution of ³H-Δ⁹-tetrahydrocannabinol in, 128
- Pappano, A. J.: Onset of chronotropic effects of nicotinic drugs and tyramine on the sinoatrial pacemaker in chick embryo heart: Relationship to the development of autonomic neuroeffector transmission, 676
- Paustian, P. W., *see* Chapnick, B. M., 44
- Pentazocine
 effects on responding under multiple schedule of reinforcement in rhesus monkeys and pigeons, 298
 stimulus properties, 121
- Pentobarbital
 blockade of calcium uptake in stimulated and potassium-depolarized rat sympathetic ganglia by, 80
 effects on responding maintained under fixed-interval schedules of food or shock presentation, 605
 effects on schedule-controlled behavior in mouse, 616
- Peptides, related to neurohypophysial hormones, natriuretic, antidiuretic and oxytocic effects of, 746
- Pert, C. B., Snyder, S. H. and May, E. L.: Opiate receptor interactions of benzomorphans in rat brain homogenates, 316
- Pharmacokinetics
 of acetaminophen by anephric patients, 570
 of acetaminophen elimination by anephric patients, 570
- Phencyclidine
 effects on schedule-controlled behavior in mouse, 616
 effect on schedule-controlled behavior in pigeon, 172
- Phenindone, influence of fasting and stress on response of rats to, 194
- Phenobarbital, induction of hepatic enzymes by, comparison with methaqualone, 204
- Phenol red, active transport by rat lung slices, .
- Phenoxybenzamine, interactions with actions of methoxamine and tryptamine on cat spinal cord segmental reflexes, 87
- Photomyoclonic syndrome, in baboon, effects of biogenic amines, 156
- Pigeon(s)
 behavioral effects of morphine, naloxone and nalorphine in, 625
 effects of morphine, pentazocine and naloxone on responding under multiple schedule of reinforcement in, 298
 effects of phencyclidine and ketamine on schedule-controlled behavior in, 172
- Pindolol, central effects on arterial blood pressure, 389
- Pineal gland, rat, correlation of binding of ³H-*l*-alprenolol with stimulation of adenylate cyclase in, 714
- Pinto, J. E. B., *see* Langer, S. Z., 697
- Plasma
 rat, [³H]cocaine in, 556
 tolerant and nontolerant dogs, distribution of ³H-Δ⁹-tetrahydrocannabinol in, 128
- Poisoning, strychnine, in dogs, sympathetic cardiovascular effects, 29
- Pong, S. and Levine, L.: Prostaglandin synthetase systems of rabbit tissues and their inhibition by nonsteroidal anti-inflammatory drugs, 226
- Pontani, R. B., *see* Misra, A. L., 257
- Powell, J. R. and Brody, M. J.: Identification and specific blockade of two receptors for histamine in the cardiovascular system, 1
- Prange, A. J., Jr., *see* Cott, J. M., 594
- Procarbazine, potentiation of barbiturate-induced narcosis by, 586
- Propranolol
d and *dl*-, central effects on arterial blood pressure, 389
 isomers, stereospecific radioimmunoassay for, 517
 positive inotropic effect on canine myocardium, 657
- Prostaglandin synthetase, systems of rabbit tissues, inhibition by nonsteroidal anti-inflammatory drugs, 226
- Prostaglandins, E, A and F, influence on vasoconstrictor responses to norepinephrine, renal

- nerve stimulation and angiotensin in feline kidney, 44
- Pruitt, A. W., *see* Rose, H. J., 238
- Pudwill, C. R.
see Marietta, M. P., 536
see White, P. F., 545
- Quinidine
effects on electrically induced automaticity in ventricular myocardium of guinea pig, 407
mechanism of action on squid axon membranes, 62
- Rabbit(s)
aortic strips and ileal segments, nicotine-like actions of *cis*- and *trans*-metanictine on, 685
choroid plexus, transport of organic cations and anions by, 771
enhancement of diphenylhydantoin binding by lipid extraction in, 579
tissues, prostaglandin synthetase systems of, inhibition by nonsteroidal anti-inflammatory drugs, 226
- Racagni, G., Cheney, D. L., Trabucchi, M. and Costa, E.: *In vivo* actions of clozapine and haloperidol on the turnover rate of acetylcholine in rat striatum, 323
- Radioimmunoassay, stereospecific, for propranolol isomers, 517
- Rat(s)
acutely and chronically treated, disposition and biotransformation of [³H]cocaine in, 556
adult, evaluation of permanent sympathectomy produced by guanethidine in, 53
aminopyrine demethylation measured by CO₂ exhalation in, 501
biodisposition of ketamine in, 536
brain cerebral cortex, noradrenergic sub- and supersensitivity after reserpine, 167
brain homogenates, opiate receptor interactions of benzomorphans in, 316
brain nuclei, reduction of tryptophan hydroxylase activity and 5-hydroxytryptamine concentration after *p*-chloroamphetamine in, 333
brain slices, effects of tetrahydrocannabinols on ³H-acetylcholine biosynthesis in, 339
brain subcellular fractions, binding *in vitro* and *in vivo* of 5,5-diphenylhydantoin to, 469
changes in sensitivity to apomorphine during morphine dependence and withdrawal in, 637
disposition and biotransformation of [allyl-1',3'-¹⁴C]naloxone in, comparison with nalorphine, 257
effects of halothane anesthesia on biodisposition of ketamine in, 545
effect of prolonged lithium ingestion on response to mineralocorticoids in, 463
enhancement of diphenylhydantoin binding by lipid extraction in, 579
evaluation of iron-chelating drugs in, 478
hepatic enzymes, induction by methaqualone and phenobarbital, 204
hypertensive, decreased vascular relaxation in, 396
liver microsomal system, theophylline metabolism by, 213
lung slices, active transport of phenol red by, 455
metabolism, distribution and anticonvulsant properties of N,N'-dimethoxymethyl phenobarbital in, 180
nafenopin-treated, biliary excretion of 3,4-benzpyrene in, 486
nontolerant and morphine tolerant-dependent, antinociceptive effects of lanthanum and cerium in, 288
oral ingestion of narcotic analgesics by, 249
participation of 2-butanone in 2-butanol-induced potentiation of carbon tetrachloride hepatotoxicity in, 493
pharmacological characterization of lithium reabsorption in, 188
pineal gland, correlation of binding of ³H-*l*-alprenolol with stimulation of adenylate cyclase in, 714
reduction of ethanol-induced sleep by thyrotropin-releasing hormone in, 594
relationship between brain levels of morphine and analgesic effect in, 642
response to warfarin, influence of fasting and stress on, 194
stereospecific radioimmunoassay for propranolol isomers in, 517
role of catecholaminergic neurons in behavioral effects of L-5-hydroxytryptophan after destruction of ascending serotonergic pathways in, 307
role of interval between doses on development of tolerance to morphine in, 280
role of peripheral sympatho-adrenal nervous system in renal hypertension in, 35
spleen, heart and superior cervical ganglion, distribution and properties of adrenergic storage vesicles in, 346
stimulus properties of pentazocine in, 121
striatum, *in vivo* actions of clozapine and haloperidol on turnover rate of acetylcholine in, 323
sympathetic ganglia, stimulated and potassium-depolarized, blockade by barbiturates of calcium uptake in, 80
vasoconstrictor actions of Δ⁸- and Δ⁹-tetrahydrocannabinols in, 649

- Reavey-Cantwell, N. H., *see* Mathur, P. P., 204
 Redding, S., *see* McMillan, D. E., 269
 Reserpine
 noradrenergic sub- and supersensitivity of cerebral cortex after, 167
 pretreatment, involvement of transmitter different from norepinephrine in residual responses to nerve stimulation of cat nictitating membrane after, 697
 Rhodotorulic acid, evaluation as iron-chelating agent, 478
 Ribonucleic acid, binding *in vitro* of 5,5-diphenylhydantoin to, 469
 Romero, J. A., *see* Zatz, M., 714
 Rose, B. A., *see* Wood, J. D., 71
 Rose, H. J., Pruitt, A. W. and McNay, J. L.: Effect of experimental azotemia on renal clearance of furosemide in the dog, 238
 Ross, C. R., *see* Miller, T. B., 771
- Sartorius muscle (*see* Muscle, sartorius)
 Sasyniuk, B. I., *see* Kus, T., 665
 Schanker, L. S., *see* Gardiner, T. H., 455
 Scopolamine, action on end-plate current of frog sartorius muscle, 360
 Serotonin
 effect on photomyoclonic syndrome in baboon, 156
 pathways, ascending, in rat, role of catecholaminergic neurons in behavioral effects of L-5-hydroxytryptophan after destruction of, 307
 Sherman, W. R., *see* Hipps, P. P., 642
 Short-circuit current, of toad urinary bladder, effects of ethanol, 231
 Shotzberger, G. S., Albuquerque, E. X. and Daly, J. W.: The effects of batrachotoxin on cat papillary muscle, 433
 Skeletal muscle (*see* Muscle, skeletal)
 Sleep, induced by ethanol, reduction by thyrotropin-releasing hormone, 594
 Sloan, J. W., *see* Bell, J. A., 373
 Small intestine, guinea pig, effects of nicotine on rebound excitation of, 71
 Sodium, abilities of benzomorphans to inhibit ³H-naloxone binding in presence and absence of, correlation with pharmacological properties, 316
 Smyth, R. D., *see* Mathur, P. P., 204
 Snyder, S. H., *see* Pert, C. B., 316
 Sofola, O. A. and Odusote, K. A.: Sympathetic cardiovascular effects of experimental strychnine poisoning in dogs, 29
 Sotolol, central effects on arterial blood pressure, 389
 Spector, S., *see* Kawashima, K., 517
 Spinal cord
 C-fiber reflexes, effect of L-tryptophan on, 373
 segmental reflexes, cat, actions of methoxamine and tryptamine and their interactions with cyproheptadine and phenoxybenzamine on, 87
 Spleen, rat and dog, distribution and properties of adrenergic storage vesicles in, 346
 Squid, axon membranes, mechanism of action of quinidine on, 62
 St. Pierre, A. J., *see* Daniell, H. B., 657
 Steele, T. H., Dudgeon, K. L. and Larmore, C. K.: Pharmacological characterization of lithium reabsorption in the rat, 188
 Stimulus properties, of pentazocine, 121
 Stress, influence on response of rats to warfarin, 194
 Striatum, rat, *in vivo* actions of clozapine and haloperidol on turnover rate of acetylcholine in, 323
 Strychnine, poisoning, in dogs, sympathetic cardiovascular effects, 29
 Sympathectomy, peripheral, role in renal hypertension, 35
 Sympathetic nervous system (*see* Nervous system, sympathetic)
 Sympathectomy, permanent, produced by guanethidine in adult rats, evaluation, 53
 Synaptic transmission blockade, effect on morphine action in guinea-pig myenteric plexus, 97
 Szekeres, L., Csik, V. and Udvary, É.: Nitroglycerin and dipyridamole on cardiac metabolism and dynamics in a new experimental model of angina pectoris, 15
- Tetraethylammonium, renal clearance in dog, effect of experimental azotemia, 238
³H-Δ⁹-Tetrahydrocannabinol, tissue and subcellular distribution in central nervous system and peripheral organs of tolerant and nontolerant dogs, 128
 Tetrahydrocannabinols
 effect on ³H-acetylcholine biosynthesis in rat brain slices, 339
 Δ⁸- and Δ⁹-, vasoconstrictor actions in rat, 649
 Tetrodotoxin, computer simulation of effects using mathematical model of myelinated nerve, 737
 Theophylline
 effect of ethanol on response of toad urinary bladder to, 231
 metabolism by rat liver microsomal system, 213
 Thiopental, blockade of calcium uptake in stimulated and potassium-depolarized rat sympathetic ganglia by, 80
 Thomsen, K., Jensen, J. and Olesen, O. V.: Effect of prolonged lithium ingestion on the response to mineralocorticoids in rats, 463
 Thyrotropin-releasing hormone, reduction of ethanol sleep by, 594

- Tissues
(*see also* specific name)
rabbit, prostaglandin synthetase systems of, inhibition by nonsteroidal anti-inflammatory drugs, 226
rat, [³H]cocaine in, 556
- Toad, urinary bladder, effect of ethanol on water permeability and short-circuit current and response to vasopressin, adenosine 3',5'-monophosphate and theophylline of, 231
- Todoroff, T., *see* Goldberg, M. A., 579
- Tolerance, to morphine, role of interval between doses on, 280
- Trabucchi, M., *see* Racagni, G., 323
- Traiger, G. J. and Bruckner, J. V.: The participation of 2-butanone in 2-butanol-induced potentiation of carbon tetrachloride, 493
- Trevor, A. J.
see Marietta, M. P., 536
see White, P. F., 545
- Tryptamine, actions on cat spinal cord segmental reflexes and its interactions with cyproheptadine and phenoxybenzamine, 87
- L-Tryptophan
effect on photomyoclonic syndrome in baboon, 156
effect on spinal cord C-fiber reflexes, 373
- Tryptophan hydroxylase, activity, reduction in certain rat brain nuclei after *p*-chloroamphetamine, 333
- Turk, R. T., *see* McMillan, D. E., 269
- Tyramine, chronotropic effects on sinoatrial pacemaker in chick embryo heart, onset related to development of autonomic neuroeffector transmission, 676
- Udvary, E., *see* Szekeres, L., 15
- UM-424, [1-dimethyl isopropylamino-3-(2-phenylphenoxy)-propan-2-ol] chloride, antiarrhythmic and cardiovascular properties, 420
- Urinary bladder (*see* Bladder, urinary)
- Urine, human, excretion of heroin and metabolites in, 249
- Vadlamani, N. L., *see* Misra, A. L., 257
- van Stone, J. C., *see* Lowenthal, D. T., 570
- Vanhoutte, P. M., *see* Muldoon, S. M., 723
- Varapamil, effects on electrically induced automaticity in ventricular myocardium of guinea pig, 407
- Vasoconstrictor actions, of Δ^8 - and Δ^9 -tetrahydrocannabinols in rat, 649
- Vasoconstrictor responses, to norepinephrine, renal nerve stimulation and angiotensin in feline kidney, influence of prostaglandins E, A and F on, 44
- Vasopressin, effect of ethanol on response of toad urinary bladder to, 231
- Vaupel, D. B. and Martin, W. R.: Actions of methoxamine and tryptamine and their interactions with cyproheptadine and phenoxybenzamine on cat spinal cord segmental reflexes, 87
- Verbeuren, T. J., *see* Muldoon, S. M., 723
- Vogh, B. P., *see* Zimmerman, T. J., 510
- Wallace, S. C., *see* McMillan, D. E., 269
- Warfarin
-induced hypoprothrombinemia, effect of induction of hepatic enzymes by methaqualone on, 204
influence of fasting and stress on response of rats to, 194
- Warltier, D. C., *see* Gross, G. J., 445
- Water, permeability of toad urinary bladder, effect of ethanol, 231
- Way, E. L., *see* Harris, R. A., 288
- Way, W. L.
see Marietta, M. P., 536
see White, P. F., 545
- Webb, J. G., *see* Daniell, H. B., 657
- Wenger, G. R.: The effect of phencyclidine and ketamine on schedule-controlled behavior in the pigeon, 172
- Wenger, G. R. and Dews, P. B.: The effects of phencyclidine, ketamine, *d*-amphetamine and pentobarbital on schedule-controlled behavior in the mouse, 616
- White, P. F., *see* Marietta, M. P., 536
- White, P. F., Marietta, M. P., Pudwill, C. R., Way, W. L. and Trevor, A. J.: Effects of halothane anesthesia on the biodisposition of ketamine in rats, 545
- Wilson, K. L., Jr., Chang, R. S. L., Bowman, E. R. and McKennis, H., Jr.: Nicotine-like actions of *cis*-metanicothine and *trans*-metanicothine, 685
- Wilson, T. W., *see* McMillan, D. E., 269
- Winokur, S., *see* Kniffen, F. J., 420
- Withdrawal, from morphine in rats, sensitivity to apomorphine during, 637
- Wood, J. D., Rose, B. A. and Jackson, M. H.: Effects of nicotine on rebound excitation of guinea-pig small intestine, 71
- Woods, J. H., *see* Downs, D. A., 298
- Yeh, J. Z. and Narahashi, T.: Mechanism of action of quinidine on squid axon membranes, 62
- Yeh, S. Y., Gorodetzky, C. W. and McQuinn, R. L.: Urinary excretion of heroin and its metabolites in man, 249
- Yunger, L. M. and Harvey, J. A.: Behavioral effects of L-5-hydroxytryptophan after destruction of ascending serotonergic pathways

- in the rat: The role of catecholaminergic neurons, 307
- Zatz, M., Keabian, J. W., Romero, J. A., Lefkowitz, R. J. and Axelrod, J.: Pineal *beta* adrenergic receptor: Correlation of binding of ^3H -l-
alprenolol with stimulation of adenylate cyclase, 714
- Zimmerman, T. J., Garg, L. C., Vogh, B. P. and Maren, T. H.: The effect of acetazolamide on the movements of anions into the posterior chamber of the dog eye, 510