

CONTENTS OF VOLUME 181

No. 1, APRIL 1972

Comparison of Anorexigenic and Behavioral Potency of Phenylethylamines. RAYMOND H. COX, JR. AND ROGER P. MAICKEL.....	1
An Approach to the <i>in Vivo</i> Study of Acetylcholine Turnover in Rat Salivary Glands by Radio Gas Chromatography. I. HANIN, R. MASSARELLI AND E. COSTA.....	10
Effects of Pilocarpine or Arecoline Administration on Acetylcholine Levels and Serotonin Turnover in Rat Brain. DEAN R. HAUBRICH AND WATSON D. REID.....	19
Serotonin Turnover in the Intact Cat Brain. AMIRAM BARKAI, MURRAY GLUSMAN AND MAURICE M. RAPPORT.....	28
Synaptosomes from Forebrains of Rats with Midbrain Raphe Lesions: Selective Reduction of Serotonin Uptake. MICHAEL J. KUJAR, ROBERT H. ROTH AND GEORGE K. AGHAJANIAN.....	36
Studies on the Transport of Morphine out of the Perfused Cerebral Ventricles of Rabbits. J. H. WANG AND A. E. TAKEMORI.....	46
Effects of <i>para</i> -Methoxyphenylethylamine on Reflexes and Motoneurons in the Cat Lumbar Spinal Cord. LARRY M. JORDAN, WILLIAM D. WILLIS, JR. AND MURRAY A. MATTHEWS.....	53
Central Nervous System Mechanisms Responsible for Blood Pressure Elevation Induced by <i>p</i> -Chlorophenylalanine. AKIRA ITO AND SAUL M. SCHANBERG.....	65
Determination of Sympathetic Vasodilator Responses during Renal Nerve Stimulation. SUSHIL K. GOMER AND BEN G. ZIMMERMAN.....	75
Neurogenic and Vascular Stores of Histamine in the Dog. MICHAEL J. RYAN AND MICHAEL J. BRODY.....	83
Pulmonary Vascular Responses to Alloxan. A. L. HYMAN, D. G. PENNINGTON AND W. E. JAQUES.....	92
Quinidonium Bromide: Cardiac Rate and Rhythm Disturbances in Barbiturate-Anesthetized Dogs. HARVEY R. KAPLAN AND SALVATORE A. LA SALA.....	98
Blood Norepinephrine Levels during Responses of the Heart-Lung Preparation to Methylguanidine. O. KRAYER, N. WEINER AND W. MOSIMANN.....	108
Effects of Adrenergic Agonists and Antagonists on Adenylate Cyclase Activity of Dog Heart and Liver. STEVEN E. MAYER.....	116
Blockade of Biochemical and Physiological Responses of Cardiac Muscle to Norepinephrine by <i>N</i> - <i>tert</i> -Butylmethoxamine (Butoxamine). WILLIAM B. WASTILA, JUDY Y. SU, WILLIAM F. FRIEDMAN AND STEVEN E. MAYER.....	126
Epinephrine-Induced Hypokalemia: Relation to Liver and Skeletal Muscle. ROBERT L. VICK, EDWARD P. TODD AND DAN W. LUEDKE.....	139
Effects of Nicotine and Sympathomimetic Amines on Potassium Intoxication. BERT K. B. LUM AND RAYMOND H. LOCKWOOD.....	147
Inhibition by Dopamine of the Hydro-Osmotic Response (Water Transfer) of the Toad Bladder to Vasopressin. P. J. BENTLEY.....	155
The Mechanism of Excitability Blockade by Chlorpromazine. RAPHAEL GRUENER AND TOSHIO NARAHASHI.....	161
Effects of Adrenalectomy on the Response of Mice to Parathyroid Hormone and Thyrocalcitonin. RALPH A. MEYER, JR. AND HOWARD J. BRINKLEY.....	171
Effect of Carbon Disulfide on Liver Function <i>in Vivo</i> and in the Isolated Perfused Liver. JON D. GIBSON AND R. J. ROBERTS.....	176
The Effects of Acetaminophen and Sodium Salicylate on the Release and Activity of Leukocytic Pyrogen in the Cat. WESLEY G. CLARK AND SANDRA G. MOYER.....	183
Effects of Vincristine on Spermatogenesis Studied by Velocity Sedimentation Cell Separation Technique and Serial Mating. INSU P. LEE AND ROBERT L. DIXON.....	192
Erratum.....	200

No. 2, MAY 1972

Chemical Studies of Potential Relevance to Penicillin Hypersensitivity: Kinetics of Formation and Disappearance of Benzylpenicillenic Acid and Its Derivatives in Solutions of Benzylpenicillin. THOMAS C. BUTLER, KENNETH H. DUDLEY AND DOROTHY JOHNSON.....	201
---	-----

The Effects of Acetazolamide and Amiloride on Tissue Electrolytes, with Reference to the Teratogenesis of Carbonic Anhydrase Inhibition. THOMAS H. MAREN AND ARTHUR C. ELLISON . . .	212
Effects of Procarbazine on Spermatogenesis Determined by Velocity Sedimentation Cell Separation Technique and Serial Mating. INSU P. LEE AND ROBERT L. DIXON	219
Effects of 3,4-Benzpyrene Pretreatment on the Hepatotoxicity of Carbon Tetrachloride in Rats. C. S. PITCHUMONI, R. J. STENGER, W. S. ROSENTHAL AND E. A. JOHNSON	227
Changes in Kidney Cortex Gluconeogenic Enzymes Induced by 1,1,1-Trichloro-2,2-Bis(<i>p</i> -Chlorophenyl)Ethane (DDT). SAM KACEW, RADHEY L. SINGHAL, PAVEL D. HRDINA AND GEORGE M. LING	234
Effect of Sodium Nitroprusside on Function in the Isolated and Intact Dog Kidney. ROBERT D. BASTRON AND GEORGE J. KALOYANIDES	244
Effect of Organic Acid Transport Inhibitors on Renal Cortical Uptake and Proximal Tubular Toxicity of Cephaloridine. BRUCE M. TUNE	250
Effects of Pentylentetrazol on Ion Transport in the Isolated Toad Bladder. G. J. GROSS AND D. M. WOODBURY	257
The Distribution of Methadone in the Nonpregnant, Pregnant and Fetal Rat after Acute Methadone Treatment. MARVIN A. PETERS, MARILYN TURNBOW AND DORIS BUCHENAUER	273
The Role of the Hepatic Microsomal Ethanol Oxidizing System (MEOS) for Ethanol Metabolism <i>in Vivo</i> . CHARLES S. LIEBER AND LEONORE M. DECARLI	279
Demethylation of Nortriptyline by the Dog Lung. E. WHITNACK, D. R. KNAPP, J. C. HOLMES, N. O. FOWLER AND T. E. GAFFNEY	288
SK&F 36914-An Agent for Oral Chrysotherapy. D. T. WALZ, M. J. DIMARTINO, B. SUTTON AND A. MISHNER	292
The Influence of CO ₂ and pH on Local Anesthetic Action. RICHARD F. H. CATCHLOVE	298
Effect of Reserpine, Phenoxybenzamine and Cocaine on Neuromuscular Transmission in the Vas Deferens of the Guinea Pig. ARUN R. WAKADE AND JOHN KRUSZ	310
Interactions of Bretylum and Drugs That Inhibit the Neuronal Membrane Transport of Norepinephrine in Isolated Rabbit Atria and Aortae. NOBORU TODA	318
The Effects of Denervation, Decentralization and Cocaine on the Response of the Smooth Muscle of the Guinea-Pig Vas Deferens to Various Drugs. DAVID P. WESTFALL, DAVID C. McCLURE AND WILLIAM W. FLEMING	328
Log-Normal Distribution of Equieffective Doses of Norepinephrine and Acetylcholine in Several Tissues. W. W. FLEMING, D. P. WESTFALL, I. S. DE LA LANDE AND L. B. JELLETT	339
Some Actions of Pentazocine on Behavior and Brain Monoamines in the Rat. STEPHEN G. HOLTZMAN AND ROBERT E. JEWETT	346
Effects of Microinjections of Ouabain into Certain Medullary Areas in Cats. B. N. BASU-RAY, S. N. DUTTA AND S. N. PRADHAN	357
Studies of the Reputed Augmentation of the Cardiovascular Effects of Catecholamines in Patients with Spontaneous Hyperthyroidism. VINCENT S. AOKI, WILLIAM R. WILSON AND ERNEST O. THEILEN	362
Hemodynamic Effects of Infused Norepinephrine in Dogs on Cardiopulmonary Bypass. PAUL L. KIRKENDOL AND ROBERT A. WOODBURY	369
Correlation of the Subcellular Distribution of Digoxin with the Positive Inotropic Effect. NAK DOO KIM, LESLIE E. BAILEY AND PETER E. DRESEL	377

No. 3, JUNE 1972

Studies on the Concurrent Behavioral and Neurochemical Effects of Psychoactive Drugs Using the Push-Pull Cannula. H. A. TILSON AND S. B. SPARBER	387
Nucleic Acid Synthesis in Brains from Rats Tolerant to Morphine Analgesia. T. R. CASTLES, S. CAMPBELL, R. GOUGE AND C. C. LEE	399
A Comparison of the Capacities of Isomers of Amphetamine, Deoxyipradrol and Methylphenidate to Inhibit the Uptake of Tritiated Catecholamines into Rat Cerebral Cortex Slices, Synaptosomal Preparations of Rat Cerebral Cortex, Hypothalamus and Striatum and into Adrenergic Nerves of Rabbit Aorta. R. M. FERRIS, F. L. M. TANG AND R. A. MAXWELL	407
Possible Mechanism(s) of Alprenolol (<i>Beta</i> Adrenergic Receptor Blocking Agent) Prolongation of Pentobarbital Hypnosis in Mice. MARVIN A. PETERS	417
The Prevention of Isoproterenol Desensitization and Isoproterenol Reversal. JEROME H. FLEISCH AND ELWOOD TITUS	425

CONTENTS

v

Potential of Bronchomotor Responses by <i>Beta</i> Adrenergic Antagonists. L. DIAMOND.....	434
Enhanced Sensitivity to Noradrenergic Agonists and Tolerance Development to α -Methyltyrosine in the Rat. F. C. BEUTHIN, T. S. MIYA, D. E. BLAKE AND W. F. BOUSQUET.....	446
Acidic and Neutral Metabolites of Norepinephrine: Their Metabolism and Transport from Brain. J. L. MEEK AND N. H. NEFF.....	457
Studies on the Synthesis and Release of Adenosine Triphosphate-8- ³ H in the Isolated Perfused Cat Adrenal Gland. PAUL STEVENS, ROBERT L. ROBINSON, KNOX VAN DYKE AND ROBERT STITZEL.....	463
Potential of Adrenal Medullary Responses to Angiotensin by [4,4'-Biphenylenebis(2-Oxoethyl-ene)]Bis[(2,2-Diethoxyethyl)Dimethylammonium Bromide] (DMAE) <i>in Vitro</i> . M. J. PEACH AND T. C. WESTFALL.....	472
Effects of Adrenergic Agents on Carbohydrate Metabolism of Rat Liver: Activities of Adenyl Cyclase and Glycogen Phosphorylase. N. E. NEWTON AND K. R. HORN BROOK.....	479
Organic Nitrates: Relationship between Biotransformation and Rational Angina Pectoris Therapy. PHILIP NEEDLEMAN, STANLEY LANG AND EUGENE M. JOHNSON, JR.....	489
Systemic and Coronary Hemodynamic Effects of Hexobendine and Its Interaction with Adenosine and Aminophylline. CHARLES E. HANSING, JOHN D. FOLTS, SKODA AFONSO AND GEORGE G. ROWE.....	498
Cardiovascular Effects of Capsaicin in Dogs and Rabbits. NOBORU TODA, HACHIRO USUI, NORIKO NISHINO AND MOTONORI FUJIWARA.....	512
Cerebral and Coronary Vascular Effects of a Symmetrical N,N'-Disubstituted Hexahydrodiazepine. J. P. BUYNISKI, M. LOSADA, M. E. BIERWAGEN AND R. W. GARDIER.....	522
Nonlinear Kinetics of Atropine Action on the Pacemaker of the Isolated Guinea-Pig Atrium. C. D. THRON.....	529
Distribution of Local Anesthetics and the Intracellular pH in Vascular Smooth Muscle. PATRICIA M. HUDGINS AND JAMES W. PUTNEY, JR.....	538
Determination of Barbiturate Derivatives by Radioimmunoassay. EDWARD J. FLYNN AND SYDNEY SPECTOR.....	547
The Role of Intestinal Bacteria in the Metabolism of Salicylazosulfapyridine. MARK A. PEPPER-CORN AND PETER GOLDMAN.....	555
The Metabolism of Indomethacin in Man. D. E. DUGGAN, A. F. HOGANS, K. C. KWAN AND F. G. McMAHON.....	563
Effects of Anticholinesterase Insecticides on Hepatic Microsomal Metabolism. JAMES T. STEVENS, ROBERT E. STITZEL AND JOSEPH J. McPHILLIPS.....	576
Index, Volume 181, April-June 1972.....	585