

CONTENTS OF VOLUME 193

No. 1, APRIL 1975

Effect of Intracerebroventricular Bradykinin and Related Peptides on Rabbit Operant Behavior. J. C. MELO AND F. G. GRAEFF.	1
Effects of Thyrotropin-Releasing Hormone (TRH) on the Actions of Pentobarbital and Other Centrally Acting Drugs. GEORGE R. BREESE, JERRY M. COTT, BARRETT R. COPPER, ARTHUR J. PRANGE, JR., MORRIS A. LIPTON AND NICHOLAS P. PLOTNIKOFF.	11
Oxilorphan (1-N-Cyclopropylmethyl-3,14-Dihydroxymorphinan): A New Synthetic Narcotic Antagonist. ANTHONY W. PIRCIO AND JONAS A. GYLYS.	23
Influence of L-Tryptophan on Morphine Analgesia, Tolerance and Physical Dependence. I. K. HO, DAVID A. BRASE, H. H. LOH AND E. LEONG WAY.	35
Effects of Cholinergic and Anticholinergic Drugs and a Partial Cholinergic Agonist on the Development and Expression of Physical Dependence on Morphine in Rat. R. C. A. FREDERICKSON AND C. PINSKY.	44
Regional Sensitivity of the Rat Brain to the Inhibitory Effects of Morphine on Wet Shake Behavior. EDDIE WEI, SHEELAH SIGEL AND E. LEONG WAY.	56
Effects of 6-Hydroxydopamine and Reserpine on Amphetamine-Induced Release of Norepinephrine in Rat Cerebral Cortex. ALBERT KALISKER, JACK C. WAYMIRE AND CHARLES O. RUTLEDGE.	64
Effects of α -Methyldopa on Dopamine Synthesis and Release in Rat Striatum <i>in Vitro</i> . NORMAN J. URETSKY, GERALD J. CHASE AND ANTONIO V. LORENZO.	73
Increased Sensitivity to Dopaminergic Agents after Chronic Neuroleptic Treatment. P. F. VON VOIGTLANDER, E. G. LOSEY AND H. J. TRIEZENBERG.	88
Induction of Tyrosine Hydroxylase Elicited by <i>Beta</i> Adrenergic Receptor Agonists in Normal and Decentralized Sympathetic Ganglia: Role of Cyclic 3',5'-Adenosine Monophosphate. I. HANBAUER, I. J. KOPIN, A. GUIDOTTI AND E. COSTA.	95
Release of Norepinephrine and Dopamine- β -Hydroxylase by Nerve Stimulation. IV. An Evaluation of a Role for Cyclic Adenosine Monophosphate. L. CUBEDDU, X., E. BARNES AND N. WEINER.	105
Vasoconstriction of the Isolated Rabbit Ear Artery Caused by Nicotinic Agonists Acting on Adrenergic Neurons. ODD S. STEINSLAND AND ROBERT F. FURCHGOTT.	128
Desensitization of the Adrenergic Neurons of the Isolated Rabbit Ear Artery to Nicotinic Agonists. ODD S. STEINSLAND AND ROBERT F. FURCHGOTT.	138
Blood Pressure and Heart Rate Responses Evoked by <i>d</i> - and <i>l</i> -Amphetamine in the Pithed Rat Preparation. LANCE L. SIMPSON.	149
Effects of Chronic Oral Contraceptive Treatment on the Conversion of Angiotensin I to Angiotensin II in the Rat. C. BELL AND Y. S. BAKHLE.	160
Vasodilating Antihypertensive Drug-Induced Aldosterone Release—A Study of Endogenous Angiotensin-Mediated Aldosterone Release in the Rat. WILLIAM B. CAMPBELL, WILLIAM A. PETTINGER, KENT KEETON AND STEVE N. BROOKS.	166
Effects of <i>Beta</i> Adrenergic Blocking Agents on Erythropoietin Production in Rabbits Exposed to Hypoxia. GREGORY D. FINK, LUIZ G. PAULO AND JAMES W. FISHER.	176
The Effects of Ajmaline in Experimental and Clinical Arrhythmias and Their Relation to Some Electrophysiological Parameters of the Heart. RUBEN BOJORGES, GUSTAVO PASTELIN, SALVADOR SANCHEZ-PEREZ, RAFAEL MENDEZ AND EMILIO KABELA.	182
Effects of Bretylum on Rat Cardiac Muscle: The Electrophysiological Effects and Its Uptake and Binding in Normal and Immunosympathectomized Rat Hearts. DONALD H. NAMM, CHING M. WANG, SALMA EL-SAYAD, FREDERICK C. COPP AND ROBERT A. MAXWELL.	194
The Effects of Dimethyl Quaternary Propranolol on the Electrophysiologic Properties of Canine Cardiac Purkinje Fibers. MICHAEL R. ROSEN, DENNIS S. MIURA AND PETER DANILO, JR.	209
Alteration in Calcium Metabolism as a Mechanism for Pyridine Aldoxime Methochloride (2-PAM) Cardiac Action in Rabbit Atria. GERALD O. CARRIER, THIES PETERS AND VERNON S. BISHOP.	218
The Pharmacology of Batrachotoxin. VII. Structure-Activity Relationships and the Effects of pH. J. E. WARNICK, E. X. ALBUQUERQUE, R. ONUR, S.-E. JANSSON, J. DALY, T. TOKUYAMA AND B. WITKOP.	232
Distribution and Metabolism of Intravenously Administered Choline[Methyl- 3 H] and Synthesis <i>in Vivo</i> of Acetylcholine in Various Tissues of Guinea Pigs. DEAN R. HAUBRICH, PAULINA F. L. WANG AND PAUL W. WEDEKING.	246

Experimental Study of a Potential Antiasthmatic Agent: Sch 15280. L. DIAMOND, G. K. ADAMS, B. BLEIDT AND B. WILLIAMS.....	256
Effect of Gentamicin on Renal Function in the Rat. LOREN COHEN, ROBERT LAPKIN AND GEORGE J. KALOYANIDES.....	264
Tracer Microinjection Studies of Prostaglandin E ₂ Transport in the Rat Nephron. MICHAEL L. KAUKER.....	274
Alteration by Phenobarbital and 3-Methylcholanthrene of Functional and Structural Changes in Rat Liver Due to Carbon Tetrachloride Inhalation. HASMUKH C. SHAH AND GARY P. CARLSON.....	281
Decreased 6-Mercaptopurine Retention by Two Resistant Variants of Mouse Neuroblastoma with Normal Hypoxanthine-Guanine-Phosphoribosyltransferase Activities. FRED BASKIN AND ROGER N. ROSENBERG.....	293
An Enzymatic Derivative Double Isotope Assay for Measuring Tissue Levels of Taurine. J. B. LOMBARDINI.....	301

No. 2, MAY 1975

Effect of Isoproterenol and D-600 on Calcium Movements in Rat Myometrium. E. A. KROEGER, J. M. MARSHALL AND C. P. BIANCHI.....	309
Effects of Verapamil on Myocardial Contractility, Cardiac Adenosine 3',5'-Monophosphate and Heart Phosphorylase. JOSEPH SHANFELD, MARILYN E. HESS AND NEIL R. LEVINE.....	317
Effect of <i>Beta</i> Receptor Blockade on the Initiation and Perpetuation of Ouabain-Induced Ventricular Tachyarrhythmia. FRANK O. APANTAKU, CLIVE M. BAUMGARTEN AND ROBERT E. TEN EICH.....	327
Neural Mechanisms Involved in Acetylcholinesterase-Induced Bradycardia. RICHARD A. GILLIS, JOHN A. QUEST, HAROLD THIBODEAUX, MARGARET M. CLANCY AND DELBERT E. EVANS.....	336
Alteration in Oxyhemoglobin Equilibrium (P-50) and Myocardial Oxygen Consumption (MVO ₂) by Nitroglycerin (GTN). GARRETT J. GROSS AND HAROLD F. HARDMAN.....	346
Renal Hemodynamics and Electrolyte Excretions after Reserpine and Ethanol. WILLIAM Q. SARGENT, JOHN R. SIMPSON AND JAMES D. BEARD.....	356
Species Variations among Primates in Responses to Drugs Which Alter the Renal Excretion of Uric Acid. G. M. FANELLI, JR., AND I. M. WEINER.....	363
Nicotine-Induced Relaxation in Isolated Canine Cerebral Arteries. NOBORU TODA.....	376
Analysis of the Effect of 5-Hydroxykynurenamine, a Serotonin Metabolite, on Isolated Cerebral Arteries, Aortas and Atria. NOBORU TODA.....	385
Differential Inhibitory Effect of Neomycin on Contractile Responses of Various Canine Arteries. H. RICHARD ADAMS AND FRANK R. GOODMAN.....	393
Sex and Estrogens and Responsiveness of Terminal Arterioles to Neurohypophyseal Hormones and Catecholamines. BURTON M. ALTURA.....	403
Dose-Response Relationships for Arginine Vasopressin and Synthetic Analogs on Three Types of Rat Blood Vessels: Possible Evidence for Regional Differences in Vasopressin Receptor Sites within a Mammal. BURTON M. ALTURA.....	413
Effect of Castration on the Smooth Muscle Cells of the Internal Sex Organs of the Rat: Influence of the Smooth Muscle on the Sympathetic Neurons Innervating the Vas Deferens, Seminal Vesicle and Coagulating Gland. ARUN R. WAKADE, A. G. GARCIA AND S. M. KIRPEKAR.....	424
Characterization by Cyproheptadine of the Dopamine-Induced Contraction in Canine Isolated Arteries. JEAN-CLAUDE GILBERT AND LEON I. GOLDBERG.....	435
Antihypertensive Drugs and Catecholamine Metabolism: Effects of Reserpine and Hydralazine on Tyrosine Hydroxylase Activity and Norepinephrine Concentrations in the Spontaneously Hypertensive Rat. CONSTANCE KOHLER, BARRY A. BERKOWITZ AND SYDNEY SPECTOR.....	443
Pressure Dependent Factors in Edema Formation in Canine Forelimbs. ROBERT L. KLINE, DANIEL P. SAK, FRANCIS J. HADDY AND GEORGE J. GREGA.....	452
Mechanical Response in the Wall of Ovarian Follicles Mediated by Adrenergic Receptors. BENGT WALLIS, LARS EDVINSSON, CHRISTER OWMAN, NILS-OTTO SJÖBERG AND KARL-GUSTAF SVENSSON.....	460
Muscarinic Cholinergic Regulation of Cyclic Guanosine 3',5'-Monophosphate in Autonomic Ganglia: Possible Role in Synaptic Transmission. JOHN W. KEBABIAN, ALTON L. STEINER AND PAUL GREENGARD.....	474

Biochemical and Histofluorescence Studies of Catecholamines in Superior Cervical Ganglia in Organ Culture. JERRY G. WEBB, JONATHAN MOSS, IRWIN J. KOPIN AND DAVID M. JACOBOWITZ.....	489
Biochemical and Functional Evaluation of the Sympathectomy Produced by the Administration of Guanethidine to Newborn Rats. EUGENE M. JOHNSON, JR., ELINOR CANTOR AND JAMES R. DOUGLAS, JR.....	503
Experimental Evidence for Calcium-Independent Catecholamine Secretion from the Bovine Adrenal Medulla. PATRICK J. O'NEILL AND RALF G. RAHWAN.....	513
The Stereoisomers of 3,4-Dihydroxyphenylserine as Precursors of Norepinephrine. G. BARTHO-LINI, J. CONSTANTINIDIS, M. PUIG, R. TISSOT AND A. PLETSCHER.....	523
Time Course of the Effect of Reserpine Administration on Tyrosine Hydroxylase Activity in Adrenal Glands and Vasa Deferentia. R. I. PFEFFER, W. F. MOSIMANN AND N. WEINER.....	533
Stimulation of Adenosine 3',5'-Monophosphate Formation in Rat Cerebral Cortical Slices by Methoxamine: Interaction with an <i>Alpha</i> Adrenergic Receptor. P. SKOLNICK AND J. W. DALY.....	549
Blockade by Reserpine of Methylphenidate-Induced Release of Brain Dopamine. C. C. CHIU EH AND K. E. MOORE.....	559
A Comparison of the Effects of Morphine and Forced Running upon the Incorporation of ¹⁴ C-Tyrosine into ¹⁴ C-Catecholamines in Mouse Brain, Heart and Spleen. M. I. SHELDON, S. SORSCHER AND C. B. SMITH.....	564
Isoproterenol- and Epinephrine-Induced Changes in Blood Glucose and Tissue Glycogen Levels in Normal and Diabetic Rats: The Influence of Alteration in Endogenous Insulin Levels and State of Nourishment. DAVID E. POTTER AND SYDNEY ELLIS.....	576
Cyproheptadine-Induced Depletion of Insulin in the Rat. DOUGLAS E. RICKERT, JON BURKE AND LAWRENCE J. FISCHER.....	585
An Analysis of the Specificity in Pharmacological Inhibition of the Passive Cutaneous Anaphylaxis Reaction in Mice and Rats. R. J. PERPER, A. L. ORONSKY AND V. BLANCUZZI.....	594
Effects of Pharmacologic Agents on Release of Lysosomal Enzymes from Alveolar Mononuclear Cells. NEIL R. ACKERMAN AND JAMES R. BEEBE.....	603
Effect of the H ₂ -Receptor Antagonists (Burimamide and Metiamide) on Gastric Secretion Stimulated by Histamine and Its Methyl Derivatives. DIETER-ULRICH PREISS AND CHARLES F. CODE.....	614
Role of Neonatal Androgen in the Development of Hepatic Microsomal Drug-Metabolizing Enzymes. L. W. K. CHUNG, G. RAYMOND AND S. FOX.....	621
4-Nitrocatechol Production from <i>p</i> -Nitrophenol by Rat Liver. JOSEPH CHRASTIL AND JOHN T. WILSON.....	631
The Effect of Acetazolamide and Carbonic Anhydrase Inhibition of Erythrocyte 2,3-Diphosphoglycerate Content and Metabolism. LESTER L. ROLF, JR. AND LAL C. GARG.....	639
The Effects of Antiepileptic Drugs on Estrogen-Induced Electrographic Spike-Wave Discharge. ROBERT M. JULIEN, GLENN W. FOWLER AND MICHAEL G. DANIELSON.....	647
Respiratory Stimulant Effects of Ethamivan and PicROTOXIN. KENNETH HIRSH AND S. C. WANG.....	657
Correlation of Brain Levels of Barbiturate Enantiomers with Reported Differences in Duration of Sleep. RALPH I. FREUDENTHAL AND JEAN MARTIN.....	664
Actions of the Antidepressant Drug Imipramine on the Voltage-Clamped Myxicola Giant Axon. C. L. SCHAUF, F. A. DAVIS AND R. L. KESLER.....	669
A Choice Procedure for Drug Reinforcers: Cocaine and Methylphenidate in the Rhesus Monkey. CHRIS E. JOHANSON AND CHARLES R. SCHUSTER.....	676
Rate-Dependent Effects of Drugs. II. Effects of Some Major Tranquilizers on Multiple Fixed-Ratio, Fixed-Interval Schedule Performance. J. DAVID LEANDER.....	689
Interresponse Time Changes as a Function of Water Deprivation and Amphetamine. ROGER M. BROWN AND LEWIS S. SEIDEN.....	701

No. 3, JUNE 1975

Influence of Carbon Monoxide, Hypoxic Hypoxia or Potassium Cyanide Pretreatment on Acute Carbon Monoxide and Hypoxic Hypoxia Lethality. JOSEPH M. WINSTON AND ROBERT J. ROBERTS.....	713
Effects of Glucagon and Other Peptides on Fixation of CO ₂ by Rat Liver Mitochondria. IAN M. SMITH, ROBERT C. HAYNES, JR. AND JEFFREY F. HARPER.....	720
Functional and Structural Changes in Isolated Rabbit Liver Mitochondria Induced by Fluorodi-	

chloromethane. O. W. VAN AUKEN, A. O. HENDERSON, R. T. S. LEE, R. H. WILSON AND J. N. BOLLINGER	729
The Effects of Chronic Ganglion Blockade and Chronic Cholinesterase Inhibition on the Sensitivity of Rabbit Stomach Muscularis to Cholinergic and Adrenergic Agonists. G. S. LEFEVER AND R. D. GREEN	739
The Effects of Ganglionic Blockade, Reserpine and Vinblastine on Plasma Catecholamines and Dopamine- β -Hydroxylase in the Rat. JOHN L. REID AND IRWIN J. KOPIN	748
Release of Norepinephrine and Dopamine- β -Hydroxylase by Nerve Stimulation. V. Enhanced Release Associated with a Granular Effect of a Benzoquinolizine Derivative with Reserpine-Like Properties. L. CUBEDDU, X., AND N. WEINER	757
Effects of Reserpine on Activities and Amounts of Tyrosine Hydroxylase and Dopamine- β -Hydroxylase in Catecholamine Neuronal Systems in Rat Brain. DONALD J. REIS, TONG H. JOH AND ROBERT A. ROSS	775
Effects of Chlorimipramine and Lysergic Acid Diethylamide on Efflux of Precursor-Formed ^3H -Serotonin: Correlations with Serotonergic Impulse Flow. DOROTHY W. GALLAGER AND GEORGE K. AGHAJANIAN	785
Effect of 3-(<i>p</i> -Trifluoromethylphenoxy)- <i>N</i> -Methyl-3-Phenylpropylamine on the Depletion of Brain Serotonin by 4-Chloroamphetamine. RAY W. FULLER, KENNETH W. PERRY AND BRYAN B. MALLOY	796
A New Selective Inhibitor for Uptake of Serotonin into Synaptosomes of Rat Brain: 3-(<i>p</i> -Trifluoromethylphenoxy)- <i>N</i> -Methyl-3-Phenylpropylamine. DAVID T. WONG, FRANK P. BYMASTER, JONG S. HORNG AND BRYAN B. MALLOY	804
Effects of Lithium Chloride on Parameters of Biosynthetic Capacity for 5-Hydroxytryptamine in Rat Brain. SUZANNE KNAPP AND ARNOLD J. MANDELL	812
Effects of Ethanol on Neurotransmitter Release by Rat Brain Cortical Slices. F. J. CARMICHAEL AND Y. ISRAEL	824
Correlation between Brain Levels and Biochemical Effects of the Optical Isomers of <i>p</i> -Chloroamphetamine. H. JOSEPH SEKERKE, HOWARD E. SMITH, JAN A. BUSHING AND ELAINE SANDERS-BUSH	835
Determination and Characterization of the Antinociceptive Activity of Intraventricularly Administered Acetylcholine in Mice. NORMAN W. PEDIGO, WILLIAM L. DEWEY AND LOUIS S. HARRIS	845
Correlation between Structure, Behavioral Activity and Rate of Biotransformation of Some ACTH_{4-9} Analogs. ALBERT WITTER, HENK M. GREVEN AND DAVID DE WIED	853
Contrasting Effects of Morphine on Schedule-Controlled Behavior in the Chimpanzee and Baboon. LARRY D. BYRD	861
Further Studies on Self-Administration of Antipyretic Analgesics and Combinations of Antipyretic Analgesics with Codeine in Rhesus Monkeys. FRIEDRICH HOFFMEISTER AND WOLFGANG WUTTKE	870
Relationship of Brain Morphine Levels to Analgesic Activity in Acutely Treated Mice and Rats and in Pellet-Implanted Mice. GRAHAM A. PATRICK, WILLIAM L. DEWEY, THEODORE C. SPAULDING AND LOUIS S. HARRIS	876
Selective Antagonism of the Intestinal Stimulatory Effects of Morphine by Isoproterenol, Prostaglandin E_1 and Theophylline. MARGARET N. GRUBB AND THOMAS F. BURKS	884
Acetanilides: Effects on Invertebrate Neurons Correlated with Analgesic Activity in Vertebrates. J. L. BARKER AND H. LEVITAN	892
The Effects of Harmaline on Sodium Transport in Human Erythrocytes: Evidence in Favor of Action at Interior Sodium-Sensitive Sites. MICHAEL J. DUNN AND WILLIAM HUNT	903
Inhibition of Granulation Tissue Growth by Histamine. KIYOMI SAEKI, JUN YOKOYAMA AND KAZUYA WAKE	910
Inhibition of the Primary Lesion of Adjuvant-Induced Polyarthritis in Rats (18-Hour Arthritis Test) for Specific Detection of Clinically Effective Antiarthritic Drugs. R. DUANE SOFIA, LINDA C. KNOBLOCH AND HEIDI B. VASSAR	918
The Renal Vascular Effects of Meglumine Diatrizoate. LAURENCE H. NORBY AND GERALD F. DiBONA	932
Effect of Hypoxemia on Responses to Norepinephrine and Angiotensin in Coronary and Muscular Vessels. DONALD D. HEISTAD, FRANCOIS M. ABOUD, ALLYN L. MARK AND PHILLIP G. SCHMID	941
Myocardial Uptake of Ouabain in Intact Dog and Man. RICHARD SELDEN AND WILLIAM A. NEILL	951
Digitalis Toxicity during Acute Hypoxia in Intact Conscious Dogs. GEORGE A. BELLER AND THOMAS W. SMITH	963
Index, Volume 193, April-June 1975	969