

CONTENTS OF VOLUME 156

No. 1, APRIL 1967

Cholinergic Properties of the Relay Junctions of the Primary Afferent Pathway. D. T. FRAZIER AND L. L. BOYARSKY	1
Monoamine Levels and Neuronal Degeneration in Rat Brain following Lateral Hypothalamic Lesions. ROBERT Y. MOORE AND ALFRED HELLER.....	12
Localization of Tritiated Serotonin in Rat Brain by Electron-Microscopic Autoradiography. GEORGE K. AGHAJANIAN AND FLOYD E. BLOOM.....	23
The Effect of Drugs on the Release of Norepinephrine-H ³ from Central Nervous System Tissues by Electrical Stimulation <i>in Vitro</i> . ROSS J. BALDESSARINI AND IRWIN J. KOPIN	31
Pharmacologic Studies of Norepinephrine, Acetylcholine and Related Compounds on Neurons in Deiters' Nucleus and the Cerebellum. C. YAMAMOTO	39
Drug Modification of the Schiff-Sherrington Phenomenon. EUGENE H. HERMAN AND CHARLES D. BARNES.....	48
Interaction between Facilitating and Depolarizing Drugs at the Neuromyal Junction of the Cat. L. C. BLABER AND A. G. KARZMAR.....	55
Modification of the Effects of Tranquilizers in Animals Treated with α -Methyl- <i>l</i> -Tyrosine. M. K. MENON, P. C. DANDIYA AND J. S. BAPNA.....	63
Antagonism by Monoamine Oxidase Inhibitors of α -Methyltyrosine-Induced Catecholamine Depletion and Behavioral Depression. KENNETH E. MOORE AND RICHARD H. RECH	70
Maze Learning after the Administration of Antidepressant Drugs. ARJE LATZ, G. BAIN, M. GOLDMAN AND C. KORNETSKY.....	76
Tolerance to the Lenticular Effects of Opiates. ALFRED A. SMITH, META KARMIN AND JOANN GAVITT.....	85
Morphine and the Incorporation of P _i ³² into Brain Phospholipids of Nontolerant, Tolerant and Abstinent Guinea Pigs. S. J. MULÉ.....	92
Comparative Effects of Codeine and Morphine in Man. D. C. KAY, C. W. GORODETZKY AND W. R. MARTIN.....	101
Inhibition of the Extraneuronal Accumulation and Metabolism of Norepinephrine by Adrenergic Blocking Agents. ARNOLD J. EISENFELD, JULIUS AXELROD AND LAWRENCE KRAKOFF	107
Histamine in Isolated Small Nerve Endings and Synaptic Vesicles of Rat Brain Cortex. K. KATAOKA AND E. DE ROBERTIS.....	114
Changes in the Sensitivity of the Sweat Glands of the Cat after Denervation. H. W. REAS AND U. TRENDELENBURG.....	126
The Relation between Norepinephrine Content and Response to Sympathetic Nerve Stimulation of Various Organs of Cats Pretreated with Reserpine. F. L. LEE...	137
Gastric Secretory Responses to Drugs Affecting Adrenergic Mechanisms in Rats. PAUL BASS AND MARGARET A. PATTERSON	142
A Pharmacologic Analysis on the Significance of the Chemical Functional Groups of Oxytocin to Its Oxytocic Activity and on the Effect of Magnesium on the <i>in Vitro</i> and <i>in Vivo</i> Oxytocic Activity of Neurohypophysial Hormones. W. Y. CHAN AND NANCY KELLEY	150
The Capacity of Different Digitalis Materials to Induce Ventricular Rhythm Disturbances in the Reserpine-Pretreated Cat. BARRIE LEVITT AND JAY ROBERTS	159
A Mathematical Analysis of the Interval-Strength Relationship in the Rat Ventricule Strip and Its Modification by Fluoroacetate. CHRISTIAN J. POSNER AND DAVID A. BERMAN	166
The <i>in Vivo</i> Effects of <i>Beta</i> Adrenergic Stimulation and Blockade on the Human Uterus at Term. W. A. MAHON, D. W. J. REID AND R. A. DAY.....	178
Effects of Dopamine on Renal Function and Hemodynamics in the Dog. M. B. MEYER, JOHN L. McNAY AND LEON I. GOLDBERG	186

A Biochemical Basis for the Renal Activity of N-7-Acetylchlorothiazide. D. E. DUGGAN.....	193
---	-----

No. 2, MAY 1967

A Comparison of Certain Properties of Catechol-O-Methyl Transferase to Those of Adrenergic <i>Beta</i> Receptors. RALPH E. GILES AND JACK W. MILLER.....	201
Agonist-Antagonist Interactions in the Normal and Supersensitive Nictitating Membrane of the Spinal Cat. RICHARD D. GREEN, III AND WILLIAM W. FLEMING...	207
Effect of Sympathectomy and Adrenalectomy upon Ganglion Blockade. MARSHALL STEINBERG AND JAMES G. HILTON.....	215
Mechanism of the Vasodilator Response to Pheniprazine. SHAKIL MOHAMMED, HAROLD F. HARDMAN AND ALBERT C. YARD.....	221
The Stimulation of Canine Prostatic Secretion by Sympathomimetic Amines. EMIL R. SMITH.....	227
Investigation of Sympathetic Activity Resulting from a Dose of Acetylcholine Producing a Hypertensive Response. V. L. CARTER, JR., D. L. TRABER AND R. W. GARDIER.....	232
Structure-Activity Relationships among a Series of Acetylenic Carbamates Related to McN-A-343. ADOLPH P. ROSZKOWSKI AND JOHN YELNOSKY.....	238
Quantitative Aspects of the Replacement of Norepinephrine by Dopamine as a Sympathetic Transmitter after Inhibition of Dopamine- β -Hydroxylase by Disulfiram. H. THOENEN, W. HAEFELY, K. F. GEY AND A. HUERLIMANN.....	246
Stimulation of the Catecholamine Output of the Isolated, Perfused Adrenal Gland of the Dog by Angiotensin and Bradykinin. ROBERT L. ROBINSON.....	252
Relationship between Hypothalamic Catecholamines and Gonadotrophin Secretion in Rats. W. LIPPMANN, R. LEONARDI, J. BALL AND J. A. COPPOLA.....	258
Release of Intestinal 5-Hydroxytryptamine by Morphine and Related Agents. T. F. BURKS AND J. P. LONG.....	267
Inhibition of Gluconeogenesis by Hydrazine Administration in Rats. SIDNEY R. FORTNEY, DALE A. CLARK AND EDUARDO STEIN.....	277
Pharmacokinetics of Salicylamide Elimination in Man. GERHARD LEVY AND TAI MATSUZAWA.....	285
The Effect of Stress upon the Performance of the Amine-Depleted Heart. C. R. BARISO, T. E. GAFFNEY, H. FUKUSUMI, J. HOLMES, N. O. FOWLER AND E. C. CONRADI.....	294
Influence of Ouabain on the Formation of Corticosterone in the Rat Adrenal Gland. ALLEN W. GOMOLL.....	300
Effects of Dopamine and α -Methyl-Dopamine on Smooth Muscle and on the Cardiac Pacemaker. T. H. TSAI, S. Z. LANGER AND U. TRENDELENBURG.....	310
Cardiovascular and Myocardial Metabolic Effects of Infusions of Phenylephrine. PHILIP J. PRIVITERA AND IRA ROSENBLUM.....	325
A Comparison of the Antiarrhythmic Actions of Two New Synthetic Compounds, Iproveratril and MJ 1999, with Quinidine and Pronethalol. JACK R. SCHMID AND CALVIN HANNA.....	331
The Cardiac Action of Lysolecithin. WILLIAM C. GOVIER AND MARGARET C. BOADLE.....	339
Reactivation by Pyridinium Aldoxime Methochloride (PAM) of Inhibited Cholinesterase Activity in Dogs after Poisoning with Pinacolyl Methylphosphonofluoridate (Soman). JOSEPH H. FLEISHER, LARREL W. HARRIS AND EDMUND F. MURTEA.....	345
Malathion Inhibition of Esterases as a Determinant of Malathion Toxicity. SHELDON D. MURPHY.....	352
Chlorothiazide-Induced Kaliuresis after Adrenalectomy. JAY Y. GILLENWATER AND GEORGE D. WEBSTER.....	366
The Use of a Clinical Whole-Body Counter in Long-Term Exchangeable Sodium Studies for the Comparison of the Effect of Different Diuretics. C. CONSTANTINIDES, D. BINOPOULOS AND B. MALAMOS.....	369

A Method for the Evaluation of Hypnotic Agents in Man. The Comparative Hypnotic Effects of Secobarbital, Methaqualone and a Placebo in Normal Subjects and in Psychiatric Patients. S. S. BLOOMFIELD, L. TETREAU, B. LAFRENIER AND J. M. BORDELEAU.....	375
The Anticonvulsant Action of Inhibitors of Carbonic Anhydrase: Site and Mode of Action in Rats and Mice. WILLIAM D. GRAY AND CHARLES E. RAUH.....	383
Relation of Chlorpromazine-Evoked Hypothermia to Disruption of Conditioned Avoidance-Escape Behavior. THOMAS A. RUDY AND HAROLD H. WOLF.....	397

No. 3, JUNE 1967

Electron-Microscopic Localization of Tritiated Norepinephrine in Rat Brain: Effect of Drugs. G. K. AGHAJANIAN AND F. E. BLOOM.....	407
The Effect of Variations of pH upon the Activation of Phosphorylase by Epinephrine in Perfused Contracting Heart, Liver Slices and Skeletal Muscle. ROBERT C. REYNOLDS AND NIELS HAUGAARD.....	417
Effect of Ethanol Intoxication and Catecholamines on Cardiac Lipoprotein Lipase Activity in Rats. SAMUEL MALLOV AND FRANK CERRA.....	426
Steric Aspects of Adrenergic Drugs. V. <i>Beta</i> Adrenergic Blocking Effects of Optical Isomers of Methoxamine and Isopropylmethoxamine. P. N. PATIL, A. TYE AND J. B. LAPIDUS.....	445
A Comparison of the Adrenergic Receptor Blocking Properties of 1-(4'-Methylphenyl)-2-Isopropylamino-Propanol-HCl and Propranolol. BERNARD LEVY.....	452
The Mechanism of the Potentiation of Norepinephrine by Antihistaminics. LAWRENCE ISAAC AND ANDRES GOTH.....	463
Potentiation of Actions of Catecholamines by a Derivative of Hemicholinium. S. WONG AND J. P. LONG.....	469
A New Effect of Reserpine: Accumulation of Glycoprotein in the Submaxillary Gland. PALMER W. TAYLOR, JR., KEITH C. RICHARDSON, PATRICIA M. RODDY AND ELWOOD TITUS.....	483
The Anti-Monoamine Oxidase Effects of Furazolidone. IVAN J. STERN, RICHARD D. HOLLIFIELD, SHERWIN WILK AND JAMES A. BUZARD.....	492
A Radiometric Microassay of Acetylcholinesterase. LINCOLN T. POTTER.....	500
Resistance to the Effect of Carbachol on the Cardiovascular System and on the Isolated Ileum of Rats after Subacute Administration of an Organophosphorus Cholinesterase Inhibitor. JOSEPH J. MCPHILLIPS AND MOHAMMED S. DAR.....	507
The Action of Imidazole on the Effects of Methylxanthines and Catecholamines on Cardiac Contraction and Phosphorylase Activity. WALTHER R. KUKOVETZ AND GERALD PÖCH.....	514
Drug-Induced Release and Pharmacodynamic Effects of Histamine in the Guinea-Pig Heart. GERALD PÖCH AND WALTHER R. KUKOVETZ.....	522
Sympathetically Mediated Effects of Angiotensin on the Dog Heart <i>in Situ</i> . WILLIAM C. FARR AND GUNTHER GRUPP.....	528
Cardiovascular Effects of Prostaglandin E ₁ . JIRO NAKANO AND J. RICHARD McCURDY.....	538
The Metabolic Fate of Tritiated Digoxin in the Dog: A Comparison of Digitalis Administration with and without a "Loading Dose." FRANK I. MARCUS, JOSEF PAVLOVICH, LINDA BURKHALTER AND CAROL CUCCIA.....	548
Effect of Vasodilators upon the Isolated Taenia Coli of the Guinea Pig. SHOICHI IMAI AND KEISUKE TAKEDA.....	557
Neuromuscular Blocking Activity and other Pharmacologic Properties of Various Carnitine Derivatives. E. A. HOSEIN, SANDRA J. BOOTH, IVAN GASOI AND GABOR KATO.....	565
Differences in the Tubocurarine Antagonism of the Activation of Muscle Spindle Afferents by Succinylcholine, Acetylcholine and Nicotine. CEDRIC M. SMITH AND EDWIN X. ALBUQUERQUE.....	573
Studies on Morphine Tolerance in Mice. I. <i>In Vivo</i> N-Demethylation of Morphine and N- and O-Demethylation of Codeine. T. K. ADLER.....	585

An Effect of Diphenylhydantoin on Posttetanic Hyperpolarization of Intramedullary Nerve Terminals. ARTHUR RAINES AND FRANK G. STANDAERT.....	591
A Comparison of the Effects of Phenobarbital and Pentobarbital on Motor Cortical Threshold and Righting Reflex Response in the Cat. ROBERT N. STRAW AND C. L. MITCHELL.....	598
Chloral Alcoholate: Reevaluation of Its Role in the Interaction between the Hypnotic Effects of Chloral Hydrate and Ethanol. PETER K. GESSNER AND BERNARD E. CABANA.....	602
Alkylating Agents and the Effects of Antidiuretic Hormone in the Toad Bladder ROBERT Z. GUSSIN, ULRIKE MIKSCHÉ AND ALFRED FARAH.....	606
Furosemide and Hydrochlorothiazide Do Not Have a Common Mode of Action. ALFRED SMALL AND EDWARD J. CAFRUNY.....	616
Erratum.....	622
Index, Volume 156, April-June 1967.....	623