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 Monoamine Levels and Neuronal Degeneration in Rat Brain following Lateral Hypo	1 -
thalamic Lesions. ROBERT Y. MOORE AND ALFRED HELLER	12
Localization of Tritiated Serotonin in Rat Brain by Electron-Microscopic Autoradiog- raphy. GEORGE K. AGHAJANIAN AND FLOYD E. BLOOM	23
The Effect of Drugs on the Release of Norepinephrine-H ^a 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. KARCZMAR	55
Modification of the Effects of Tranquilizers in Animals Treated with α -Methyl- <i>l</i> -Tyro-	
sine. M. K. MENON, P. C. DANDIYA AND J. S. BAPNA	63
Antagonism by Monoamine Oxidase Inhibitors of α -Methyltyrosine-Induced Catechol- amine 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 Pi ²² into Brain Phospholipids of Nontolerant, Tol-	
erant and Abstinent Guinea Pigs. S. J. MULÉ Comparative Effects of Codeine and Morphine in Man. D. C. KAY, C. W. GORO-	92
DETZKY AND W. R. MARTIN.	101
Inhibition of the Extraneuronal Accumulation and Metabolism of Norepinephrine by	
Adrenergic Blocking Agents. ARNOLD J. EISENFELD, JULIUS AXELBOD AND	
LAWRENCE KRAKOFF	107
Histamine in Isolated Small Nerve Endings and Synaptic Vesicles of Rat Brain Cortex.	114
K. KATAOKA AND E. DE ROBERTIS. Changes in the Sensitivity of the Sweat Glands of the Cat after Denervation. H. W.	114
REAS AND U. TRENDELENBURG	126
The Relation between Norepinephrine Content and Response to Sympathetic Nerve	120
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 in Vitro	
and in Vivo Oxytocic Activity of Neurohypophysial Hormones. W. Y. CHAN AND	
NANCY KELLEY	150
ances in the Reserpine-Pretreated Cat. BARRIE LEVITT AND JAY ROBERTS	150
A Mathematical Analysis of the Interval-Strength Relationship in the Rat Ventricle	109
Strip and Its Modification by Fluoroacetate. CHRISTIAN J. POSNER AND DAVID	
	166
The in Vivo Effects of Beta 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

CONTENTS

No. 2, May 1967

A Comparison of Certain Properties of Catechol-O-Methyl Transferase to Those of Adrenergic Beta Receptors. RALPH E. GILES AND JACK W. MILLER	01
brane of the Spinal Cat. RICHARD D. GREEN, III AND WILLIAM W. FLEMING 20 Effect of Sympathectomy and Adrenalectomy upon Ganglion Blockade. MARSHALL	07
	15
HAROLD F. HARDMAN AND ALBERT C. YARD	21
The Stimulation of Canine Prostatic Secretion by Sympathomimetic Amines. EMIL R. SMITH	27
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.	32
Structure-Activity Relationships among a Series of Acetylenic Carbamates Related to McN-A-343. Adolph P. Roszkowski AND John YELNOSKY	
Quantitative Aspects of the Replacement of Norepinephrine by Dopamine as a Sympa- thetic Transmitter after Inhibition of Dopamine-β-Hydroxylase by Disulfiram.	
H. THOENEN, W. HAEFELY, K. F. GEY AND A. HUERLIMANN	46
the Dog by Angiotensin and Bradykinin. ROBERT L. ROBINSON	52
Relationship between Hypothalamic Catecholamines and Gonadotrophin Secretion in Rats. W. LIPPMANN, R. LEONARDI, J. BALL AND J. A. COPPOLA	58
Release of Intestinal 5-Hydroxytryptamine by Morphine and Related Agents. T. F.	67
Inhibition of Gluconeogenesis by Hydrazine Administration in Rats. SIDNEY R. FORT-	77
Pharmacokinetics of Salicylamide Elimination in Man. GERHARD LEVY AND TAI	
MATSUZAWA	
CONRADI	
ALLEN W. GOMOLL	00
Pacemaker. T. H. TSAI, S. Z. LANGER AND U. TRENDELENBURG	
PHILIP J. PRIVITERA AND IRA ROSENBLUM	25
Iproveratril and MJ 1999, with Quinidine and Pronethalol. JACK R. SCHMID AND CALVIN HANNA	31
The Cardiac Action of Lysolecithin. WILLIAM C. GOVIER AND MARGARET C. BOADLE	39
Reactivation by Pyridinium Aldoxime Methochloride (PAM) of Inhibited Cholin- esterase Activity in Dogs after Poisoning with Pinacolyl Methylphosphono- fluoridate (Soman). JOSEPH H. FLEISHER, LARREL W. HARRIS AND EDMUND F.	
MURTHA	45
D. MURPHY	52
Chlorothiazide-Induced Kaliuresis after Adrenalectomy. JAY Y. GILLENWATER AND GEORGE D. WEBSTER	66
The Use of a Clinical Whole-Body Counter in Long-Term Exchangeable Sodium Studies for the Comparison of the Effect of Different Diuretics. C. CONSTANTI-	
NIDES, D. BINOPOULOS AND B. MALAMOS	69

CONTENTS

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. TETREAULT, B. LAFRENIER AND	
J. M. BORDELEAU	375
Action in Rats and Mice. WILLIAM D. GRAY AND CHARLES E. RAUH Relation of Chlorpromazine-Evoked Hypothermia to Disruption of Conditioned Avoidance-Escape Behavior. THOMAS A. RUDY AND HAROLD H. WOLF	
- No. 3, June 1967	
Electron-Microscopic Localization of Tritiated Norepinephrine in Rat Brain: Effect	
of Drugs. G. K. AGHAJANIAN AND F. E. BLOOM The Effect of Variations of pH upon the Activation of Phosphorylase by Epineph- rine in Perfused Contracting Heart, Liver Slices and Skeletal Muscle. ROBERT	407
C. REYNOLDS AND NIELS HAUGAARD Effect of Ethanol Intoxication and Catecholamines on Cardiac Lipoprotein Lipase	
Activity in Rats. SAMUEL MALLOV AND FRANK CERRA Steric Aspects of Adrenergic Drugs. V. Beta Adrenergic Blocking Effects of Optical Isomers of Methoxamine and Isopropylmethoxamine. P. N. PATIL, A. TYE	426
AND J. B. LAPIDUS. A Comparison of the Adrenergic Receptor Blocking Properties of 1-(4'-Methyl-	445
phenyl)-2-Isopropylamino-Propanol-HCl and Propranolol. BERNARD LEVY The Mechanism of the Potentiation of Norepinephrine by Antihistaminics. LAW-	
RENCE ISAAC AND ANDRES GOTH Potentiation of Actions of Catecholamines by a Derivative of Hemicholinium. S.	
Wong and J. P. Long A New Effect of Reserpine: Accumulation of Glycoprotein in the Submaxillary Gland. PALMER W. TAYLOR, JR., KEITH C. RICHARDSON, PATRICIA M. RODDY AND EL-	
WOOD TITUS. The Anti-Monoamine Oxidase Effects of Furazolidone. IVAN J. STERN, RICHARD	483
D. Hollifield, Sherwin Wilk and James A. Buzard	
A Radiometric Microassay of Acetylcholinesterase. LINCOLN T. POTTER Resistance to the Effect of Carbachol on the Cardiovascular System and on the Iso- lated Ileum of Rats after Subacute Administration of an Organophosphorus	500
Cholinesterase Inhibitor. JOSEPH J. MCPHILLIPS AND MOHAMMED S. DAR The Action of Imidazole on the Effects of Methylxanthines and Catecholamines on Cardiac Contraction and Phosphorylase Activity. WALTHER R. KUKOVETZ	507
and Gerald Pöch	514
Drug-Induced Release and Pharmacodynamic Effects of Histamine in the Guinea-Pig Heart. GERALD POCH AND WALTHER R. KUKOVETZ	522
Sympathetically Mediated Effects of Angiotensin on the Dog Heart in Situ. WILLIAM C. FARR AND GUNTHER GRUPP	528
Cardiovascular Effects of Prostaglandin E1. JIRO NAKANO AND J. RICHARD MCCURDY	
The Metabolic Fate of Tritiated Digoxin in the Dog: A Comparison of Digitalis Ad- ministration with and without a "Loading Dose." FRANK I. MARCUS, JOSEE	
PAVLOVICH, LINDA BURKHALTER AND CAROL CUCCIA Effect of Vasodilators upon the Isolated Taenia Coli of the Guinea Pig. Shoichi	
IMAI AND KEISUKE TAKEDA Neuromuscular Blocking Activity and other Pharmacologic Properties of Various Carnitine Derivatives. E. A. HOSEIN, SANDRA J. BOOTH, IVAN GASOI AND GABOR	557
Като Differences in the Tubocurarine Antagonism of the Activation of Muscle Spindle Afferents by Succinylcholine, Acetylcholine and Nicotine. Серкіс М. Sмітн	565
AND EDWIN X. ALBUQUERQUE.	573
Studies on Morphine Tolerance in Mice. I. In Vivo N-Demethylation of Morphine and N- and O-Demethylation of Codeine. T. K. ADLER	585

CONTENTS

591
59 8
602
606
616
622
623

vi