

CONTENTS OF VOLUME 157

No. 1, JULY 1967

The Relationship of Intracellular Depolarization Rates and Contractility in the Dog Ventricle <i>in Situ</i> : Effects of Positive and Negative Inotropic Agents. JACK K. PRUETT AND EUGENE F. WOODS.....	1
Calcium Movements in Resting and Stimulated Isolated Rabbit Atria. DAVID G. TEIGER AND ALFRED FARAH.....	8
Studies on the Cardiovascular Effects of Synthetic Vasopressin. JIRO NAKANO.....	19
A New Anorexic Agent, Wy-5244: Cardiovascular Actions and Influence on Sympathomimetic Amines. THOMAS BAUM AND MELVIN I. GLUCKMAN.....	32
Increased Sympathetic Vasoconstrictor Tone in Dogs Treated Chronically with Mecamylamine. H. VIDRIO AND E. G. PARDO.....	42
The Negative Inotropic Action of Ephedrine and Its Modification by Various Agents. ALAN M. GOLDBERG AND F. E. SHIDEMAN.....	49
Studies on the Potentiation of the Inotropic Actions of Certain Catecholamines by U-0521 (3',4'-Dihydroxy- α -Methyl Propiophenone). RALPH E. GILES AND JACK W. MILLER.....	55
The Effects of Triiodothyronine on Hemodynamic Responses to Epinephrine and Norepinephrine in Man. VINCENT S. AOKI, WILLIAM R. WILSON, ERNEST O. THEILEN, WILLIAM W. LUKENSMEYER AND PAUL E. LEAVERTON.....	62
Localization of Norepinephrine and Acetylcholinesterase in Separate Neurons Supplying the Guinea-Pig Vas Deferens. CHRISTOPHER BELL AND JOHN R. MCLEAN.....	69
The Influence of Sympathetic Nervous Activity on Cardiac Catecholamine Levels. B. BHAGAT.....	74
Monoamine Oxidase Inhibiting Properties of Su-11, 739 in the Rat. Comparison with Pargyline, Tranlycypromine and Iproniazid. L. MAITRE.....	81
Effect of Monoamine Oxidase Inhibition on Biliary Excretion of Metabolites of Norepinephrine by Isolated Rat Liver. RICHARD P. ZIMON, GERTRUDE M. TYCE, EUNICE V. FLOCK, SHELDON G. SHEPS AND CHARLES A. OWEN, JR.....	89
The Effect of Disulfiram on Catecholamine Levels in the Brain. MENEK GOLDSTEIN AND KAZUHIKO NAKAJIMA.....	96
The Sympathetic Nervous System as a Homeostatic Mechanism. I. Absolute Need for Sympathetic Nervous Function in Body Temperature Maintenance of Cold-Exposed Rats. R. P. MAICKEL, N. MATUSSEK, D. N. STERN AND B. B. BRODIE.....	103
The Sympathetic Nervous System as a Homeostatic Mechanism. II. Effect of Adrenocortical Hormones on Body Temperature Maintenance of Cold-Exposed Adrenalectomized Rats. R. P. MAICKEL, D. N. STERN, E. TAKABATAKE AND B. B. BRODIE.....	111
Sympathetic Nerve-Free Vascular Muscle. J. A. BEVAN AND M. A. VERITY.....	117
Evidence that Blockade of Adrenergic Receptors Causes Overflow of Norepinephrine in Cat's Colon after Nerve Stimulation. DAVID J. BOULLIN, E. COSTA AND B. B. BRODIE.....	125
Mechanisms of Sympathomimetic Effects of Dichloroisoproterenol: Comparison with Tyramine, Nicotine and Norepinephrine. NARANJAN S. DHALLA.....	135
Potentiation and Antagonism of Biogenic Amines. FELIX J. RAUZZINO AND JOSEPH SEIFTER.....	143
Effect of Morphine on Electrically-Induced Release of Autonomic Mediators in the Rabbit Sinuatrial Node. BARBARA L. KENNEDY AND THEODORE C. WEST.....	149
Antiparasymphathomimetic Effects of Cholinesterase Inhibitor Treatment. LASZLO Z. BITO, KELLY HYSLOP AND JOHN HYNDMAN.....	159
Localization of <i>d</i> -Tubocurarine-H ³ at the Motor Endplate. ELLIS N. COHEN, LUCIEN J. RUBINSTEIN, ALDO N. CORBASCIO AND NANCY HOOD.....	170
Some Effects of Morphine and Morphine Antagonists on Schedule-Controlled Behavior. D. E. McMILLAN AND W. H. MORSE.....	175
A Comparison of the Pharmacologic Effects of Morphine and N-Methyl Morphine. R. S. FOSTER, D. J. JENDEN AND PETER LOMAX.....	185
The Mechanism of Mobilization of Lead by Ethylenediaminetetraacetate. P. B. HAMMOND, A. L. ARONSON AND W. C. OLSON.....	196
Gadolinium Oxide Inhalation by Guinea Pigs: A Correlative Functional and Histopathologic Study. MICHAEL ABEL AND R. B. TALBOT.....	207

Induction of Periarthritis by Oral Administration of 6-Sulfanilamidoindazole and Its Treatment in Rats. E. B. SIGG, M. L. GRAEME AND M. JOHN.....	214
A Sensitive Method for the Determination and Isolation of Pentobarbital-C ¹⁴ Metabolites and Its Application to <i>in Vitro</i> Studies of Drug Metabolism. R. KUNTZMAN, M. IKEDA, M. JACOBSON AND A. H. CONNEY.....	220
The Effect of Phenobarbital on Drug Metabolic Enzyme Activity, Ultrastructure and Growth of a "Minimal Deviation" Hepatoma (Morris 7800). LARRY A. ROGERS, H. P. MORRIS AND JAMES R. FOUTS.....	227
Diffusion of Certain Weak Organic Acids and Bases across the Bovine Mammary Gland Membrane after Systemic Administration. G. E. MILLER, N. C. BANERJEE AND C. M. STOWE, JR.....	245

No. 2, AUGUST 1967

Time Course of the Development of Supersensitivity to Various Amines in the Nictitating Membrane of the Pithed Cat after Denervation or Decentralization. S. Z. LANGER, P. R. DRASKÓCZY AND U. TRENDELENBURG.....	255
Histochemical and Fine Structural Aspects of the Onset of Denervation Supersensitivity in the Nictitating Membrane of the Spinal Cat. L. S. VAN ORDEN, III, K. G. BENSCH, S. Z. LANGER AND U. TRENDELENBURG.....	274
Demonstration by the Histochemical Fluorescence Method of the Prolonged Disappearance of Catecholamines from the Denervated Nictitating Membrane of the Cat. N. WEINER, S. Z. LANGER AND U. TRENDELENBURG.....	284
The Effect of Reserpine upon the Synthesis of Norepinephrine in the Isolated Rabbit Heart. CHARLES O. RUTLEDGE AND NORMAN WEINER.....	290
Autoinhibition in Rabbit Aortic Strips after Epinephrine. EFRAÍN G. PARDO, ENRIQUE HONG AND JACQUES LELORIER.....	303
The Effects of Pentobarbital on the Fate of Intracisternally Administered Norepinephrine-H ³ . SAUL M. SCHANBERG, JOSEPH J. SCHILDKRAUT AND IRWIN J. KOPIN.....	311
Acetylcholine Release from the Cat Superior Cervical Ganglion by Carbachol. DORIS N. MCKINSTRY AND GEORGE B. KOELLE.....	319
Effects of Drugs on Acetylcholine Release from the Cat Superior Cervical Ganglion by Carbachol and by Preganglionic Stimulation. DORIS N. MCKINSTRY AND GEORGE B. KOELLE.....	328
Nonmuscarinic Stimulation and Block of a Sympathetic Ganglion by 4-(<i>m</i> -Chlorophenylcarbamoyloxy)-2-Butynyltrimethylammonium Chloride (McN-A-343). JORGE JARAMILLO AND ROBERT L. VOLLE.....	337
Actions of Lithium Ions in Mammalian Sympathetic Ganglia. ACHILLES J. PAPPANO AND ROBERT L. VOLLE.....	346
Steric Aspects of Adrenergic Drugs. VI. <i>Beta</i> Adrenergic Effects of Ephedrine Isomers. A. TYE, R. BALDESBERGER, J. B. LAPIDUS AND P. N. PATIL.....	356
Effects of Methotrimeprazine, Other Phenothiazines and Related Compounds on the Levels of Norepinephrine in the Mouse Heart. W. LIPPMANN AND M. WISHNICK.....	363
Insulin Stimulation of Lactate Oxidation and Incorporation into Glycogen in Frog Skeletal Muscle. D. R. H. GOURLEY AND TAE KYU SUH.....	371
The Development of Resistance to a Potent Lipolysis Inhibitor, 3-Methylisoxazole-5-Carboxylic Acid. JOSEPH N. PEREIRA AND GERALD F. HOLLAND.....	381
Action of Local Anesthetics on Coupling Systems in Muscle. C. PAUL BIANCHI AND T. C. BOLTON.....	388
Entry of Labeled Carbachol in Brain Slices of the Rat and the Action of <i>d</i> -Tubocurarine and Strychnine. R. CREESE AND D. B. TAYLOR.....	406
The Human Pharmacology and Abuse Potential of N-Allylnoroxymorphone (Naloxone). D. R. JASINSKI, W. R. MARTIN AND C. A. HAERTZEN.....	420
Effects of Serotonin on the Toxin of <i>Clostridium Botulinum</i> . DANIEL A. BOROFF AND URSULA FLECK.....	427
Prophylaxis against Sarin Poisoning in the Rat by Oral Administration of Pralidoxime Chloride. PETER ZVIRBLIS AND ALBERT A. KONDRITZER.....	432
Effect of Pretreatment of Rabbits with Phenobarbital or 3-Methylcholanthrene on the Distribution of Drug-Metabolizing Enzyme Activity in Subfractions of Hepatic Microsomes. THEODORE E. GRAM, LARRY A. ROGERS AND JAMES R. FOUTS.....	435
The Metabolism of Chlorpromazine by Liver Microsomal Enzyme Systems. PETER F. COCCIA AND W. W. WESTERFELD.....	446

Intracellular Disposition of H ³ -Morphine in the Brain and Liver of Nontolerant and Tolerant Guinea Pigs. S. J. MULÉ, C. M. REDMAN AND J. W. FLESHER.....	459
The Potassium-Sparing and Natriuretic Activity of N-Amidino-3,5-Diamino-6-Chloropyrazinecarboxamide Hydrochloride Dihydrate (Amiloride Hydrochloride). J. E. BAER, C. B. JONES, S. A. SPITZER AND H. F. RUSSO.....	472
Erratum.....	405

No. 3, SEPTEMBER 1967

Photic and Neural Control of the 24-Hour Norepinephrine Rhythm in the Rat Pineal Gland. RICHARD J. WURTMAN, JULIUS AXELROD, GÖRAN SEDVALL AND ROBERT Y. MOORE.....	487
Metabolic Pathways of Dopamine and Norepinephrine in Rabbit Brain <i>in Vitro</i> . CHARLES O. RUTLEDGE AND JAN JONASON.....	493
Application of Isotope Derivative Technique to Assay of Secondary Amines: Estimation of Desipramine by Acetylation with H ³ -Acetic Anhydride. WOLFGANG M. HAMMER AND BERNARD B. BRODIE.....	503
Uptake, Storage and Metabolism of Norepinephrine in Tissues of the Developing Rat. LESLIE L. IVERSEN, JACQUES DE CHAMPLAIN, JACQUES GLOWINSKI AND JULIUS AXELROD.....	509
Influence of Metanephrine on Responses of the Nictitating Membrane of the Pithed Cat to Sympathomimetic Amines. S. Z. LANGER, M. G. BOGAERT AND A. F. DE SCHAEPPDRYVER.....	517
The Effects of Sympathetic Stimulation and Epinephrine on the Superior Rectus Muscle of the Cat. KENNETH E. EAKINS AND RONALD L. KATZ.....	524
Potentiality by Tetraethylammonium of the Response of the Cat Spleen to Postganglionic Sympathetic Nerve Stimulation. H. THOENEN, W. HAEFELY AND H. STAEHELIN.....	532
Effects on Temperature of Serotonin and Epinephrine Injected into the Lateral Cerebral Ventricle of the Cat. A. S. KULKARNI.....	541
Some Correlations between Picrotoxin-Induced Seizures and γ -Aminobutyric Acid in Animal Brain. SHOJI SAITO AND YUKIKO TOKUNAGA.....	546
Effect of Strychnine Convulsions upon the Entry of S ³⁵ Sulfate into the Cat Central Nervous System. ANTONIO V. LORENZO AND CHARLES F. BARLOW.....	555
Dependence of <i>m</i> -Fluorophenylalanine Toxicity on Phenylalanine Hydroxylase Activity. B. KENNETH KOE AND ALBERT WEISSMAN.....	565
Metabolism of Trichloroethylene in Liver Microsomes. II. Induction of the Enzymic Activity and Its Effect on Excretion of Metabolites. KENNETH C. LEIBMAN AND WILLIAM J. McALLISTER, JR.....	574
The Fate of 5-Iodo-2'-Deoxyuridine (IUdR) in Plasma and Cerebrospinal Fluid of Dogs. D. R. CLARKSON, W. W. OPPELT AND P. BYVOET.....	581
Further Studies on the Urinary Metabolites of Thiamine Propyl Disulfide in Rats. KOHEI NISHIKAWA, SUZUOKI-ZIRO AND MITSUO NUMATA.....	589
The Problem of Na ⁺ + K ⁺ Adenosine Triphosphatase as the Receptor for Diuretic Action of Mercurials and Ethacrynic Acid. BOHDAN R. NECHAY, ROGER F. PALMER, DAVID A. CHINYOY AND VIRGINIA A. POSEY.....	599
Effects of Angiotensin and Renal Artery Constriction on Erythropoietin Production. JAMES W. FISHER, A. I. SAMUELS AND J. W. LANGSTON.....	618
The Tubular Transport and Metabolism of Morphine-N-Methyl-C ¹⁴ by the Chicken Kidney. DAVID G. MAY, JAMES M. FUJIMOTO AND CHARLES E. INTURRISI.....	626
A Comparison of Antagonists of Physostigmine-Induced Suppression of Behavior. GEORGE E. VAILLANT.....	636
Effects of a Hydrazine Monoamine Oxidase Inhibitor (Phenelzine) on Isoproterenol-Induced Myocardiopathies in the Rat. H. C. STANTON AND A. SCHWARTZ.....	649
Effects of Quinidine on Electrical Behavior in Cardiac Muscle. MYRON PRINZMETAL, KAZUO ISHIKAWA, HIROSHI OISHI, EMIR OZKAN, JIRO WAKAYAMA AND JAMES M. BAINES.....	659
Effects of Acetylsalicylic Acid on the Canine Response to Endotoxin. L. B. HINSHAW, L. A. SOLOMON, E. G. ERDÖS, D. A. REINS AND B. J. GUNTER.....	665
Use of a Competitive Vitamin K Antagonist, 2-Chloro-3-Phytyl-1,4-Naphthoquinone, for the Study of the Mechanism of Action of Vitamin K and Coumarin Anticoagulants. JULIUS LOWENTHAL AND J. A. MACFARLANE.....	672
Index, Volume 157, July-September 1967.....	681