

CONTENTS

NUMBER 1, MAY, 1955

I. The Epinephrine and Hydrocarbon-Epinephrine Disturbance in the Cat. Walter F. Riker, France Depierre, Jay Roberts, B. B. Roy and Joseph Reilly	1
II. Pharmacological Studies with Deserpidine, a New Alkaloid from <i>Rauwolfia Canescens</i> . Jurg A. Schneider, A. J. Plummer, A. E. Earl, W. E. Barrett, R. Rinehart and R. C. Dibble	10
III. Intracellular Distribution of Digitoxin-C ¹⁴ in the Heart. Stewart C. Harvey and George R. Pieper	14
IV. Studies on Selenium Metabolism: The Distribution of Selenium in the Tissues of the Mouse. Max Heinrich, Jr. and F. E. Kelsey	28
V. The Interrelationships among the Central, Peripheral and Anticholinesterase Effects of Some Morphinan Derivatives. D. C. Young, R. A. Vander Ploeg, R. M. Featherstone and E. G. Gross	33
VI. Absorption and Excretion of Certain Triphenylmethane Colors in Rats and Dogs. S. M. Hess and O. G. Fitzhugh	38
VII. The Influence of the Adrenal Medulla in Morphine Analgesia. Jack W. Miller, Robert George, Henry W. Elliott, C. Y. Sung and E. Leong Way	43
VIII. The Effect of Hydrocortisone on the Oxygen Uptake of Inflamed Tissue. Harold C. Heim, Richard A. Deitrich and John G. McDonald	51
IX. The Pharmacology of the Anticholinergic Quaternary Ammonium Compound Benzomethamine [N-Diethylaminoethyl-N'-Methyl-Benzilamide Methobromide (MC 3199)] with a Note on the Tertiary Amine Analogue (MC 3137). Richard C. Ursillo and Byron B. Clark	54
X. The Biotransformation, Excretion, and Distribution of the Anticholinergic Quaternary Ammonium Compound Benzomethamine [N-Diethylaminoethyl-N'-Methyl-Benzilamide Methobromide (MC-3199)] and its Tertiary Amine Analogue (MC 3137) and Related Compounds in Animals. Ruth Mitchell Levine and Byron B. Clark	63
XI. Factors Influencing the Intestinal Absorption of Certain Monoquaternary Anticholinergic Compounds with Special Reference to Benzomethamine [N-Diethylaminoethyl-N'-Methyl-Benzilamide Methobromide (MC 3199)]. Ruth Mithcell Levine, Murray R. Blair and Byron B. Clark	78
XII. The Antidiuretic Action of Protoveratrine, and its Mechanism in Dogs. William P. Blackmore	87
XIII. On the Mechanism of the Positive Inotropic Action of Fluoride, Oleate, and Calcium on the Frog's Heart. Otto Loewi	90
XIV. Comparative Studies of 6-Substituted Delta ⁶ -Desoxymorphines and Morphine with Special Reference to 6-Methyl-Delta ⁶ -Desoxymorphine. Peter D. Orahovats, Charles A. Winter, Edward G. Lehman and Lars Flataker	100
XV. Comparative Effects of a Wide Range of Doses of L-Epinephrine and of L-Norepinephrine on the Contractile Force of the Heart <i>In Situ</i> . Marion DeV. Cotten and Sylvester Pincus	110
XVI. The Potentiation of the Action of Adenosine on the Guinea Pig Heart by Ouabain. M. Rand, Anne Stafford and R. H. Thorp	119

NUMBER 2, JUNE, 1955

XVII. Properties of a Toxin from the Salivary Gland of the Shrew, <i>Blarina brevicauda</i> . Sydney Ellis and Otto Krayer	127
--	-----

XVIII. Control of Pulmonary Edema with Silicone Aerosols. Mark Nickerson and Charles F. Curry	138
XIX. Effect of Respiratory Acidosis and Alkalosis on Cyclopropane-Epinephrine Induced Arrhythmias in the Dog. Robert W. Virtue and Burton F. Simmons	148
XX. An Experimental Design for the Biological Assay of Histamine Using the Guinea Pig Ileum. R. M. Gesler and Michio Matsuba	151
XXI. Effect of Variations in Extracellular Sodium Concentrations on the Susceptibility of Mice to Pentylenetetrazole (Metrazol)-Induced Seizures. Ewart A. Swinyard, Donald O. Schiffman and Louis S. Goodman	160
XXII. The Histochemical Identification of Acetylcholinesterase in Cholinergic, Adrenergic and Sensory Neurons. George B. Koelle	167
XXIII. Isobols of Dose-Effect Relations in the Combination of Pentylenetetrazole and Phenobarbital. S. Loewe	185
XXIV. Pharmacologic Properties of Tropine 4-Chlorobenzhydryl Ether Hydrochloride (SL-6057), a Potent Long-Acting Antihistaminic Agent. James Y. P. Chen	192
XXV. Epinephrine in the Circulating Blood During Ether Anesthesia. D. T. Watts	203
XXVI. The Effect of Certain Tri-Substituted Phosphine Oxides on Synaptic Conduction in the Roach. Kenneth D. Roeder and Nancy K. Kennedy	211
XXVII. The Effect of Morphine on Hepatic Blood Flow in the Normal Anesthetized Dog. Cheves M. Smythe and Joseph P. Gilmore	221
XXVIII. The Influence of Pentylenetetrazole, Strychnine and Curare on the Electrical Activity of the Brain and Cord of the Salamander. J. J. Peters, A. R. Vonderahe and P. A. Palmisano	225
XXIX. Interaction of d-Tubocurarine, Ether, Cyclopropane and Thiopental on Ganglionic Transmission. Nils Normann and Bertil Löfström	231
XXX. Studies on the Potentiation of Thiopental. Joseph H. Mirsky and Nicholas J. Giarman	240
NUMBER 3, JULY, 1955	
XXXI. The Metabolic Fate of Codeine in Man. T. K. Adler, J. M. Fujimoto, E. Leong Way and Elton M. Baker	251
XXXII. The Effect of Various Hypotensive Agents on the Arterial Blood Pressure of Hypertensive Rats and Dogs. Arthur Grollman	263
XXXIII. The Effects of Veratrum, Dibenzylamine and Hexamethonium on Blood Pressure as Studied with an Artificial Heart-Lung. R. A. Waud, A. M. Lansing and R. A. Lewis	271
XXXIV. The Use of Certain Neuromuscular Blocking Drugs in an Analysis of Ventricular Irregularities Induced in the Cat. Jay Roberts, Bidhu B. Roy, Joseph Reilly, Solomon Garb, Walter F. Riker, Jr. and Koroku Hashimoto	279
XXXV. The Physiological Disposition and Fate of Meperidine (Demerol) in Man and a Method for its Estimation in Plasma. J. J. Burns, Betty L. Berger, Philip A. Lief, Alfred Wollack, E. M. Papper and Bernard B. Brodie	289
XXXVI. Action of Salicylates and Related Compounds on Carbohydrate Metabolism and on Adrenal Ascorbic Acid and Cholesterol Concentrations. Gloria Comulada Feeney, Pierre-Em. Carlo and Paul K. Smith	299
XXXVII. Pharmacology of Some New Unsymmetrical Bisquaternary Hypotensive Agents—Carboline Derivatives. Thomas B. O'Dell, Cris Luna and Martha D. Napoli	306
XXXVIII. Pharmacology of Some New Unsymmetrical Bisquaternary Hypotensive Agents—Isoquinoline Derivatives. Thomas B. O'Dell, Cris Luna and Martha D. Napoli	318

XXXIX. Pharmacological Studies on the Hypnotic and Anticonvulsant Actions of Ethyl Beta-Chlorovinyl Ethynyl Carbinol. S. Y. P'an, M. J. Kodet, J. F. Gardocki, W. N. McLamore and A. Bavley	327
XL. A Comparison of the Positive Inotropic Effects of Ouabain and Epinephrine in Heart Failure Induced in the Dog Heart-Lung Preparation by Sodium Pentobarbital, Dinitrophenol, Sodium Cyanide and Sodium Azide. Carl C. Gruhzt and Alfred E. Farah	335
XLI. Metabolism of Thiopental-S ³⁵ and Thiopental-2-C ¹⁴ by a Rat Liver Mince and Identification of Pentobarbital as a Major Metabolite. Wallace D. Winters, Elliot Spector, Donald P. Wallach and F. E. Shideman	344
XLII. Dual Mechanism of Anti-Emetic Action of 10 (γ -Dimethylaminopropyl)-2-Chlorophenothiazine Hydrochloride (Chlorpromazine) in Dogs. Vincent V. Glaviano and S. C. Wang	359
XLIII. Cardiovascular Actions of Decaborane. R. P. Walton, J. A. Richardson and O. J. Brodie	368

NUMBER 4, AUGUST, 1955

XLIV. Trichuricidal Activity of Phthalofyne and Certain Related Compounds. Frank A. Ehrenford, Alice B. Richards, Benedict E. Abreu, Earl R. Bockstahler, Lawrence C. Weaver and Carl A. Bunde	381
XLV. Studies on the Excretion of Hydrazine and Metabolites. Herbert McKennis, Jr., Jesse H. Weatherby and Lloyd B. Witkin	385
XLVI. Effect of Structure on the Ability of Hydrazino Compounds to Produce Fatty Livers. Allan S. Yard and Herbert McKennis, Jr.	391
XLVII. The Effect of Drugs upon Neuromuscular Transmission in the Isolated Guinea Pig Diaphragm. Donald J. Jenden	398
XLVIII. The Enzymatic Metabolism of Hexobarbital (Evipal). Jack R. Cooper and Bernard B. Brodie	409
XLIX. A Method of Assay of the Oxytocic Activity of Angiotonin Preparations on the Rat's Uterus. Hans Schwarz, Georges M. C. Masson and Irvine H. Page	418
L. The Enzymatic Demethylation of Ephedrine. Julius Axelrod	430
LI. The Effect of Nalorphine, Levallorphan and Analogues of Levallorphan upon the Hyperglycemic Response of Dogs to Levorphan. C. B. Pittinger, E. G. Gross and O. M. Richardson	439
LII. A Survey of Agents Producing Cardiovascular Manifestations of Epinephrine Discharge. E. F. Woods and J. A. Richardson	445
LIII. The Renal Site of Action of Mercurial Diuretics. Robert W. Gardier and Robert A. Woodbury	453
LIV. The Effects of Aminophylline and Meperidine Alone and in Combination on the Respiratory Response to Carbon Dioxide Inhalation. M. W. Stroud, 3rd, C. J. Lambersten, J. H. Ewing, R. H. Kough, R. A. Gould and C. F. Schmidt	461
LV. Anesthesia XLVI. Fluorinated Ethylenes and Cardiac Arrhythmias Induced by Epinephrine. Raymond M. Burgison, W. Edward O'Malley, Claire K. Heisse, Jane W. Forrest and John C. Krantz, Jr.	470
LVI. Pharmacological Actions of a Convulsant Barbiturate [Sodium 5-Ethyl-5-(1,3-Dimethylbutyl) Barbiturate]. I. Stimulant and Depressant Effects. Edward F. Domino, Kaye E. Fox and Theodore M. Brody	473
LVII. The Tolerance of Large Doses of Sodium Borate Intravenously by Patients Receiving Neutron Capture Therapy. Herbert B. Locksley and Lee E. Farr	484
LVIII. Index	491