

CONTENTS

NUMBER 1, MAY, 1957

I. A Fluorometric Method for the Measurement of 4-amino-10-methyl Pteroylglutamic Acid (Amethopterin) in Plasma. M. V. Freeman....	1
II. Effects of Ribosides and Related Compounds on Cation Transport in Cold-Stored Human Erythrocytes. J. B. Kahn, Jr. and Shelby B. Cohen....	9
III. Effects of LSD 25, BOL 148, Bufotenine, Mescaline and Ibogaine on the Potentiation of Hexobarbital Hypnosis Produced by Serotonin and Reserpine. Gian Carlo Salmoiraghi and Irvine H. Page.....	20
IV. A Spectrophotofluorometric Study of Organic Compounds of Pharmacological Interest. Sidney Udenfriend, Daniel E. Duggan, Bruno M. Vasta and Bernard B. Brodie.....	26
V. Effects of <i>Dextro</i> -amphetamine upon Judgment. G. T. Hauty and R. B. Payne.....	33
VI. Auricular Fibrillation by Acetylcholine Injection During Hypopotassemia. Phillip E. Leveque.....	38
VII. The Influence of Various Spatial Groups on Cholinolytic Activity. J. P. Long and A. M. Lands.....	46
VIII. Distribution and Fate of Nalorphine in the Dog and Rat. L. A. Woods and H. E. Muehlenbeck.....	52
IX. Comparative Distribution of Morphine and Nalorphine in Dog Brain. L. A. Woods.....	58
X. Studies on Veratrum Alkaloids. XXV. Veratrine Response and Anti-veratrinic Action in Frog Sartorius Muscle. Peter N. Witt and Charles R. Swaine.....	63
XI. Enzymatic Oxidation of Pentobarbital and Thiopental. Jack R. Cooper and Bernard B. Brodie.....	75
XII. The Distribution of Gold Following the Injection of Obesity-inducing Doses of Aurothioglucose in the Mouse. Gerald Friedman and Jay Tepperman.....	84
XIII. Bioassay for Cardiac Active Principles Based on the Staircase Phenomenon of the Frog Heart. Stephen Hajdu.....	96
XIV. The Isolation of a Cardiac Active Principle from Mammalian Tissue. Stephen Hajdu, Herbert Weiss and Elwood Titus.....	99

NUMBER 2, JUNE, 1957

XV. Hemodynamic Effects of Levarterenol Infusion During Induced Pulmonary Stenosis. Noble O. Fowler, E. R. Duchesne and R. H. Franch....	115
XVI. Bioassay of <i>Rauwolfia</i> Roots and Alkaloids. Bernard Rubin, Marvin H. Malone, Margaret H. Waugh and John C. Burke.....	125
XVII. A Study of Substances Which Alter Intraventricular Conduction in the Isolated Dog Heart. Henry H. Swain and Charles L. Weidner.....	137
XVIII. Central and Peripheral Components of the Action of "Ganglionic" Blocking Agents. A. S. Dontas and Mark Nickerson.....	147
XIX. Action of Eserine and Amphetamine on the Electrical Activity of the Rabbit Brain. V. G. Longo and B. Silvestrini.....	160
XX. The Toxicology of Potassium and Sodium Iodates: Acute Toxicity in Mice. Stewart H. Webster, Mary E. Rice, Benjamin Highman and W. F. von Oettingen.....	171
XXI. Some Observations on the Interaction of Reserpine and LSD. M. Taeschler and A. Cerletti.....	179

XXII. Objective Comparison of Primidone and Phenobarbital in Epileptics. Charles M. Gruber, Jr., Jack M. Mosier and Phyllis Grant	184
XXIII. Biochemical and Pharmacological Studies on <i>O</i> -Tyrosine and its <i>Meta</i> and <i>Para</i> Analogues. A Suggestion Concerning Phenylketonuria. Chozo Mitoma, Herbert S. Posner, Donald F. Bogdanski and Sidney Udenfriend	188
XXIV. The Effect of 6-Mercaptopurine on Nucleic Acid Biosynthesis in <i>Escherichia coli</i> . H. George Mandel, Joseph K. Inscoe, Harriet M. Maling and Paul K. Smith	195
XXV. The Relation Between Dose of Succinylcholine and Duration of Apnea in Man. W. Kalow and D. R. Gunn	203
XXVI. Antagonism of Tubocurarine III. Time Course of Action of Pyridostigmin, Neostigmine, and Edrophonium <i>In Vivo</i> and <i>In Vitro</i> . Cedric M. Smith, James C. Mead and Klaus R. Unna	215
XXVII. Distribution and Metabolic Fate of S ³⁵ -Labeled Myleran (Busulfan) in Normal and Tumor-Bearing Rats. Chin-Tzu Peng	229
XXVIII. Effects of Ribosides and Related Compounds on Phosphate Transport in Incubated Fresh and Cold-Stored Human Erythrocytes. J. B. Kahn, Jr.	239
XXIX. A Comparative Study of the Effects of Four Different <i>Rauwolfia</i> Preparations Administered Parenterally. Ralph V. Ford, Richard E. Borreson, Gene R. Lindley and John H. Moyer	247
XXX. Effect of Iproniazid on Serotonin Metabolism <i>In Vivo</i> . Sidney Udenfriend, Herbert Weissbach and Donald F. Bogdanski	255
XXXI. The Effect of Certain Central Nervous System Depressants on Pituitary-Adrenal Activating Agents, P. F. Dirk Van Peenen and E. Leong Way	261

NUMBER 3, JULY, 1957

XXXII. Relation of Peripheral Vasodilator Activity to Chemical Structure of 1,2,3,4-Tetrahydroisoquinoline Derivatives. Donald L. Cook, Coleta A. Lawler and John W. Cusic	269
XXXIII. Pyridine-2-aldoxime Methiodide in the Treatment of Sarin and Tabun Poisoning, with Notes on its Pharmacology. Robert V. Brown, Anne M. Kunkel, Lea M. Somers and J. Henry Wills	276
XXXIV. The Effects of some Acetylcholine Derivatives on the Cholinesterases of Chick Embryo Intestine Cultured <i>in Vitro</i> . Alan Burkhalter, R. M. Featherstone, F. W. Schueler and Marion Jones	285
XXXV. Enzymatic Reduction of Prontosil and Other Azo Dyes. James R. Fouts, Jerome J. Kamm and Bernard B. Brodie	291
XXXVI. Effects of Diphenylhydantoin on Synaptic Transmission in Cat Spinal Cord and Stellate Ganglion. Don W. Esplin	301
XXXVII. Frequency-force Relationship in the Rabbit Auricle and its Modification by some Metabolic Inhibitors. B. Katzung, H. Rosin and F. Scheider	324
XXXVIII. Release of Serotonin from Blood Platelets by Reserpine <i>in Vitro</i> . Arvid Carlsson, Parkhurst A. Shore and Bernard B. Brodie	334
XXXIX. Pharmacology of <i>d</i> -Lysergic Acid Morpholide (LSM). John H. Gogerty and James M. Dille	340
XL. Prevention of Experimental Polyarthritis with Sodium Aurothiomalate. Gaëtan Jasmin	349
XLI. Studies of Analgesic Drugs: Dihydrocodeine. Arthur S. Keats, Jane Telford and Yoshio Kurosu	354
XLII. Comparative Effects of Epinephrine and Levarterenol (<i>l</i> -Norepinephrine) on Left Ventricular Performance in Conscious and Anesthetized Dogs. Theodore C. West and Robert F. Rushmer	361

- XLIII. A Study in the Dog of the Renal Clearance of Morphine and the Effect of Morphine on *p*-Aminohippurate Clearance. W. P. Baker and L. A. Woods. 371
- XLIV. A Comparison of some Phenothiazine Derivatives in Inhibiting Apomorphine-Induced Emesis. Herbert Rosenkilde and William M. Govier. . . . 375
- XLV. The Effect of Chlorpromazine on Fear-motivated Behavior in Rats. Robert E. Miller, John V. Murphy and I. Arthur Mirsky. 379
- XLVI. Use of Differential Bar-pressing Rates of Rats for Screening Analgesic Drugs. I. Techniques and Effects of Morphine. Harris E. Hill, Frank T. Pescor, Richard E. Belleville and Abraham Wikler. 388

NUMBER 4, AUGUST, 1957

- XLVII. Chemoreflex Activity of Dextromethorphan (Romilar), Dextrorphan, Codeine and Morphine in the Cat and the Dog. Carl C. Gruhzit. 399
- XLVIII. Influence of pH and Atropine on the Response of Superfused Tissues to 5-Hydroxytryptamine and Acetylcholine. James L. Leitch, D. Maryn, V. G. Debley and Thomas J. Haley. 408
- XLIX. Studies on Veratrum Alkaloids XXVI. Comparison of the Cardiac Action of Various Tertiary Amine Ester Alkaloids. J. M. Benforado. 412
- L. The Effects of Relaxin-containing Ovarian Extracts on Various Types of Smooth Muscle. Jack W. Miller, Anthony Kisley and William J. Murray. . 426
- LI. Pharmacology of some new Unsymmetrical Bisquaternary Hypotensive Agents—Substituted Pyridine and Piperidine Derivatives. Thomas B. O'Dell and Martha D. Napoli. 438
- LII. The Absorption and Metabolism of Anileridine, Ethyl-1-(4-aminophenethyl)-4-phenylisonipeccotate. Curt C. Porter. 447
- LIII. The Curariform Action of Streptomycin. Oswaldo Vital Brazil and Alexandre Pinto Corrado. 452
- LIV. The Differential Effect of Quinidine and Pylamine on the Myocardial Action Potential at Various Rates of Stimulation. E. A. Johnson and M. G. McKinnon. 460
- LV. Tolerance to some Effects of Barbiturates. Richard E. Belleville and H. F. Fraser. 468
- LVI. Some Factors Affecting the Biological Disposition of Small Doses of Morphine in Rats. T. K. Adler, H. W. Elliott and R. George. 475
- LVII. Histochemical Demonstration of Reversible Anticholinesterase Action at Selective Cellular Sites *in Vivo*. George B. Koelle. 488
- LVIII. *In Vitro* Oxidation of Morphine by Rat Tissue Homogenates. Eikichi Hosoya and Theodore M. Brody. 504
- LIX. Effects of Sympathomimetic Drugs on Pulmonary Circulation: With Special Reference to a New Pulmonary Vasodilator. Domingo M. Aviado, Jr. and Carl F. Schmidt. 512
- LX. Absorption of Drugs from the Stomach I. The Rat. Lewis S. Schanker, Parkhurst A. Shore, Bernard B. Brodie and C. Adrian M. Hogben. 528
- LXI. Absorption of Drugs from the Stomach II. The Human. C. Adrian M. Hogben, Lewis S. Schanker, Dominick J. Tocco and Bernard B. Brodie. . . 540