CONTENTS

Effect of L-Dopa on Plasma Renin Activity with and without Inhibition of Extracerebral Dopa Decarboxylase in Dogs. MARTHA L. BLAIR, JAN A. REID AND WILLIAM F. Ganong .......................... 209
Aldosterone Antagonism Studies in the Rhesus Monkey. LORENZ M. Hofmann, HIDANIA A. PEDREIRA AND OSAM D. SULEYMANOV .................................. 216
The Role of the Kidney in the Early Nondiuretic Action of Furosemide to Reduce Elevated Left Atrial Pressure in the Hypervolemic Dog. WILLIAM A. BOURLAND, DANIEL K. DAY AND HAROLD E. WILLIAMSON ........................................... 221
The Effects of Haloperidol, Chlorpromazine and Propranolol on Acute Amphetamine Poisoning in the Conscious Dog. JOHN D. CATRAVAS, I. W. WATERS, JOHN P. HICKENBOTTEN AND W. MARVIN DAVIS ........................................... 230

No. 2, AUGUST 1977

Carbon Disulfide. I. The Metabolism of Inhaled Carbon Disulfide in the Rat. MICHAEL J. MCKENNA AND VICTOR DI STEFANO .................................. 245
Carbon Disulfide. II. A Proposed Mechanism for the Action of Carbon Disulfide on Dopamine β-Hydroxylase. MICHAEL J. MCKENNA AND VICTOR DI STEFANO .................................. 253
Inhibition of Norepinephrine Accumulation by Amphetamine Derivatives: Studies with Rat Brain and Rabbit Aorta. GLENN S. TAKIMOTO, ARTHUR K. CHO AND JAMES C. SCHAFFER .................................. 267
Kinetics of Accumulation, Efflux and the Pharmacological Effects of Trinitiated Dihydroazapetine on the Rabbit Aorta. ROBERT R. RUFFOLO, JR., JOHN W. FOWBLE, DUANE D. MILLER AND POPAT N. PATIL .................................. 278
The Site and the Mechanism of Phenoxycbenzamine Potentiation of the Pressor Response to Oxytocin and Vasopressin: In Vivo and Isolated Aortic Strips Studies. EDWARD F. EKKER AND W. Y. CHAN .................................. 287
Requirements for Angiotensin Tachyphylaxis in Smooth Muscles. THEREZINHA B. PAIVA, MARIA E. MIYAMOTO, LUIZ JULIANO AND ANTONIO C. M. PAIVA .................................. 294
Adrenergic Receptor Mechanisms Involved in the Hyperglycemia and Hyperlacticacidemia Produced by Sympathomimetic Amines in the Cat. SHU-HUI KUO, JOSEPH K. KAMAKA AND BERT K. B. LUM .................................. 301
Central Depression of Carotid Baroreceptor Pressor Response, Arterial Pressure and Heart Rate by 5-Hydroxytryptophan: Influence of Supracollicular Areas of the Brain. A. S. TADEPALLI, E. MILLS AND S. M. SCHANBERG .................................. 310
Leakage of dl-Propranolol from Cerebrospinal Fluid to the Bloodstream in the Rabbit. WARWICK P. ANDERSON, PAUL I. KORNER, ALEX BOBIK AND JOHN P. CHALMERS .................................. 320
Pharmacological Studies of OPC-2009, a Newly Synthesized Selective Beta Adrenoceptor Stimulant, in the Bronchomotor and Cardiovascular System of the Anesthetized Dog. YOSUICHI YABUCHI, SHUJI YAMASHITA AND SEI-SO TEI .................................. 326
Differences in Pulmonary and Cardiovascular Beta Receptors in the Guinea Pig and Rabbit. R. M. WEISSBERG, J. BRADSHAW AND R. ALVAREZ .................................. 337
The Relationship between Cyclic Nucleotide Levels and Glycogen Phosphorylase Activity in Isolated Rat Hearts Perfused with Epinephrine and Acetycholine. RUSSELL M. GARDNER AND DONALD O. ALLEN .................................. 346
Binding and Effect of Trinitiated Quinidine on Cardiac Subcellular Enzyme Systems: Sarcoplasmic Reticulum Vesicles, Mitochondria and Na⁺,K⁺-Adenosine Triphosphatase. HENRY R. BESCH, JR. AND AUGUST M. WATANABE .................................. 354
Pharmacokinetics of Quinidine in Humans after Intravenous, Intramuscular and Oral Administration. DAVID J. GREENBLATT, HENRY J. PFEIFER, HERMANN R. OCHS, KATE FRANKE, DEAN S. MACLAUGHLIN, THOMAS W. SMITH AND JAN KOCH-WESER .................................. 365
Epinephrine and Recovery from Punishment. WILLIAM C. HOLZ, ROBERT G. PENDLETON, WILLIAM T. FRY AND CHARLES A. GILL .................................. 379
Theophylline Action on Sodium Fluxes in Frog Striated Muscle. E. T. HAYS, P. HOBOWICZ AND J. G. SWIFT .................................. 388
Facilitatory and Inhibitory Effects of γ-Aminobutyric Acid on Ganglionic Transmission in the Sym pathetic Cardiac Nerves of the Dog. TOMOHIKO KIMURA, HIROSHI IMAMURA AND KOROKU HASHIMOTO .................................. 397
Motor Nerve Terminal Facilitatory Action of SQ 2009: An Inhibitor of Cyclic Nucleotide Phosphodiesterase. ROBERT S. JACOBS AND DAWN M. MCNIECE .................................. 404
Studies on the Direct Spinal Action of Narcotics in the Production of Analgesia in the Rat. TONY
L. YARSH AND THOMAS A. RUDY .......................... 411
Effects of Morphine and Haloperidol on the Electrical Activity of Rat Nigrostriatal Neurons. KATSUYA
IWATSUNO AND DORIS H. CLOUET ...................... 429
The Analgesic Action of Baclofen p-(4-Chlorophenyl)-p-Aminobutyric Acid. RICHARD A. LEVY AND
HERBERT K. PROUDFIT .............................. 437
Antiproliferative Activity of Anti-Inflammatory Drugs in Two Mammalian Cell Culture Lines. VAL-
DEMAR HAL, MARA C. F. DE MELLO, ZDENKA HORAKOVA AND MICHAEL A. BEAVEN ............. 446
Alteration of A^-Tetrahydrocannabinol-Induced Teratogenicity by Stimulation and Inhibition of Its
Metabolism. RAYMOND D. HARRISON, BERNARDO MANTILLA-PLATA AND DAVID J. LUBIN ....... 455
Inhibition of Transport and Prevention of Toxicity of Cephalexin in the Kidney. Dose-Responsiveness
of the Rabbit and Guinea Pig to Probenecid. BRUCE M. TUNE, KAI YIN WU AND RICHARD
L. KEMPSON ........................................... 466
Transport and Toxicity of Cephalexin in the Kidney. Effect of Furosemide, p-Aminohippurate and
Saline Diuresis. BRUCE M. TUNE, KAI YIN WU, DORIS F. LONGERBEAM AND RICHARD L. KEMPSON 472
Evaluation of Anticonvulsants in Barbiturate Withdrawal. MICHIKO OKAMOTO, HOWARD ROSENFELD 479
Erratum .................................................. 490

No. 3, September 1977

Nitrous Oxide Self-Administration by the Squirrel Monkey. RONALD W. WOOD, JAMES GRUBMAN
AND BERNARD WEISS .................................. 491
Some Effects of Cocaine and Two Cocaine Analogs on Schedule-Controlled Behavior of Squirrel Mon-
Ornithine Decarboxylase in Developing Rat Heart and Brain: Role of Sympathetic Development for
Responses to Autonomic Stimulants and the Effects of Reserpine on Maturation. JORGE BAR-
tolome; CHRISTOPHER LAU AND THEODORE A. SLOTKI .......................... 510
Acute Changes in Central Serotonin Metabolism Induced by the Blockade or Stimulation of Seroton-
ergic Receptors during Ontogenesis in the Rat. S. BOURGOIN, F. ARTAUD, A. ENJALBERT, F. HERY,
J. GLOWINSKI AND M. HAMON .......................... 519
Conformationally defined Adrenergic Agents. II. The Effect of Endo- and Exo-2-Aminobenzabicyclo-
[2.2.2.7]Octene, Conformationally Defined Amphetamines Analogs, on the Uptake and Release of
Central Catecholamines. R. MARTIN BARTHOLOM, LEE E. EIDEN, JAMES A. RUTH, GARY L.
GRUNEWALD, JANE SIEBERT AND CHARLES O. RUTLEDGE ........................................... 532
The Release of Endogenous Norepinephrine and Dopamine from Cerebral Cortex by Amphetamine.
ELLEN B. ARNOLD, PERRY B. MOLINOFF AND CHARLES O. RUTLEDGE ...................... 544
Participation of an Endogenous Ca"-Binding Protein Activator in the Development of Drug-Induced
Supersensitivity of Striatal Dopamine Receptors. M. GNERY, P. UZUNOV AND E. COSTA ............ 558
Studies on the Mechanism of Stimulation of Dopamine Synthesis by Amphetamine in Striatal Slices.
NORMAN J. URETSKY AND S. ROBERT SNOBGRAUS .......................... 565
Comparison between the Neurotoxic and Serotonin-Depleting Effects of Various Halogenated Deriva-
tives of Amphetamine in the Rat. JOHN A. HARVEY, SCOTT E. Mc MASTER AND RAY W. FULLER 581
Endogenous Inhibitors of Dopamine p-Hydroxylase: Separation of Multiple Forms and Access to the
Enzyme. J. C. OBCUTT AND P. B. MOLINOFF .......................... 590
Lanthanum Block of Contraction and of Relaxation in Response to Serotonin and Dopamine in Mol-
luscan Catch Muscle. YOSHI MONBEKOA AND BETTY M. TWABOG .......................... 601
Subsensitivity of the Presynaptic Alpha Adrenoceptors after Short-Term Surgical Denervation of
the Cat Nictitating Membrane. S. Z. LANGER AND M. A. LUCHELLI-FORTIS .................. 610
Delay in Nerve Degeneration after Sympathectomy of the Submaxillary Gland of the Rat by Treat-
ment with Parglyline, Nialamide or p-TM-10. SONIA ABRILLA, CARLOS J. PEREC AND FRANCISCO
J. E. STEFANO ........................................... 622
Studies on the Interactions of Propranolol with Adrenergic Neurons. DAVID A. SAELENS, HERMAN B.
DANIEL AND JERRY G. WEBB .......................... 635
Calcium Antagonist Activity of Methadone, L-Acetylmethadol and L-Pentazocine in the Rat Aortic
Strip. CHI-HO LEE AND BARRY A. BERKOWITZ .......................... 646
Single-Dose Tolerance to Morphine Hypothermia in the Rat: Differentiation of Acute from Long-Term
Tolerance. GARY C. ROSENFIELD AND THOMAS F. BURKS ........................................... 654
Electric Shock Titration: Effects of Morphine, Methadone, Pentazocine, Nalorphine, Naloxone, Diazep-
am and Amphetamine. LINDA A. DYKSTRA AND D. E. MCMILLAN ...................... 660
Effects of Acute Alcohol Intake on Pituitary-Gonadal Hormones in Normal Human Males. Jack H. Mendelson, Nancy K. Mello and James Ellingsboe ....................................... 676
Inosine as a Cardiotonic Agent That Reverses Adrenergic Beta Blockade. Alexander Juhász-Nagy and Domingo M. Aviado ................................................................. 683
Interaction of Spironolactone and Digoxin in Dogs. G. E. Musgrave, C. K. Born, C. P. Davidson and M. E. Hamrick ................................................................. 696
Direct and Beta Adrenergic Blocking Actions of Nadolol (SQ 11725) on Electrophysiologic Properties of Isolated Canine Myocardium. John K. Gibson, Henry Gelband and Arthur L. Bassett ................................................................. 702
Transport Ontogeny and Selective Substrate Stimulation As Models for Identification of Multiple Renal Organic Anion Transport System. William R. Hewitt, Peggy A. Wagner, Eileen F. Bostwick and Jerry B. Hook ................................................................. 711
The Rapid Reduction of Diosulfiram in Blood and Plasma. John Cobby, Michael Mayersohn and Sathi Selliah ................................................................. 724
Increased Biliary Tree Permeability Produced in Rats by Hepatoactive Agents. Richard E. Peterson and John M. Fujimoto ................................................................. 732
Index, Volume 202, July-September 1977 ................................................................. 741