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. PEDRELA AND OSMAN 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. HICKENBOTTEM 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 VIC TOR DI STEFANO ........................................ 245
Carbon Disulfide. II. A Proposed Mechanism for the Action of Carbon Disulfide on Dopamine β-Hydroxylase. MICHAEL J. MCKENNA AND VIC TOR 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. SCHEPHER ........................................ 267
Kinetics of Accumulation, Efflux and the Pharmacological Effects of Tritated Dihydroxyamphetamine on the Rabbit Aorta. ROBERT R. RUFFOLI, JR., JOHN W. FOWBLE, DUANE D. MILLER AND POPAT N. PATIL ........................................ 278
The Site and the Mechanism of Phenoxbenzamine Potentiation of the Pressor Response to Oxytocin and Vasopressin: In Vivo and Isolated Aortic Strips Studies. EDWARD F. EKER 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 Adrenocceptor Stimulant, in the Bronchomotor and Cardiovascular System of the Anesthetized Dog. YOICHITI YABUCHI, SHUJI YAMASHITA AND SEI-SO TEL ........................................ 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 Acetylocholine. RUSSELL M. GARDNER AND DONALD O. ALLEN ........................................ 346
Binding and Effect of Tritated Quinidine on Cardiac Subcellular Enzyme Systems: Sarcoplastic 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. PFEIFFER, HERMANN R. OCHE, 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 Sympathetic Cardiac Nerves of the Dog. TOMOHIKO KIMURA, HIROSHI IMAMURA AND KOROKU HASHIMOTO ........................................ 397
Motor Nerve Terminal Facilitatory Action of SQ 20009: 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
CONTENTS

1977

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 Monkeys. R. D. SPEALMAN, S. R. GOLDBERG, R. T. KELLEHER, D. M. GOLDBERG AND J. P. CHARLTON 500

Orotidine 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-TOLOMÉ; CHRISTOPHER LAU AND THEODORE A. SLOTKIN ........................................... 510

Acute Changes in Central Serotonin Metabolism Induced by the Blockade or Stimulation of Serotonergic Receptors during Ontogenesis in the Rat. S. BOURGOIN, F. ARTAUD, A. ENJALBERT, F. HÉRY, J. GLOWINSKI AND M. HAMON .......... 519

Conformationally Defined Adrenergic Agents. II. The Effect of Endo- and Exo-2-Aminobenzabicyclo[2.2.2]octene, Conformationally Defined Amphetamines Analogs, on the Uptake and Release of Central Catecholamines. R. MARTIN BARTHOLOW, 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 SNOGDGRASS .......... 565

Comparison between the Neurotoxic and Serotonin-Depleting Effects of Various Halogenated Derivatives of Amphetamine in the Rat. JOHN A. HARVEY, SCOTT E. McMaster AND Ray W. FULLER 581

Endogenous Inhibitors of Dopamine β-Hydroxylase: Separation of Multiple Forms and Access to the Enzyme. J. C. ORCUTT AND P. B. MOLINOFF .............................................. 590

Lanthanum Block of Contraction and of Relaxation in Response to Serotonin and Dopamine in Molluscan Catch Muscle. YOJIRO MUNEOKA AND BETTY M. TWAROG .... 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 Treatment with Pargyline, Nialamide or β-TM-10. SONIA ABBILLA, CARLOS J. PEREZ 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. ROSENFELD AND THOMAS F. BURKS 654

Effects of Acute Alcohol Intake on Pituitary-Gonadal Hormones in Normal Human Males. Jack H. Mendelson, Nancy K. Mello and James Ellingboe .......................................................... 676
Inosine as a Cardiotonic Agent That Reverses Adrenergic Beta Blockade. Alexander Juhasz-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 Cobb, 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