CONTENTS

Neurochemical and Behavioral Effects of Corticotropin-Releasing Factor in the Ventral Tegmental Area of the Rat. Peter W. Kalivas, Patricia Duffy and L. Greg Latimer ................................................................. 757
Norepinephrine Regulation of Alpha-1 Receptors and Alpha-1-Stimulated Phosphoinositide Hydrolysis in Primary Neuronal Cultures. Rozen H. Gonzalez, Fulton T. Crews, Colin Summers and Mohan K. Raimada .................................................................................. 764
Analysis of Putative Alpha-1 Adrenoceptor Agonism by Sgd 101/75 in the Rat Anococcygeus Muscle. M. K. James and H. J. Leighton ............................................................................................................. 772
Reinforcing and Subjective Effects of Several Anorectics in Normal Human Volunteers. L. D. Chait, E. H. Uhlenhuth and C. E. Johanson .......................................................... 777
Adenosine Mediates the Negative Chronotropic Action of Adenosine 5'-Triphosphate in the Canine Sinus Node. Amir Pelleg, Takao Mitsuoka, Eric L. Michelson and Hyman Menduke ........................................................................... 791
Discriminative Stimulus Properties of D1 and D2 Dopamine Agonists in Rats. Jonathan B. Kamien, Leon I. Goldberg and William L. Woolverton ......................................................... 804
Diltiazem and Autoregulation of Canine Cerebral Blood Flow. William J. Pearce and John A. Bevan ......................................................................................................................... 812
Cytotoxicity of Oxidative Metabolites of Procanamide. Robert L. Rubin, Jack P. Uetrecht and Joyce E. Jones ...................................................................................................................... 833
Regulation of Alpha-1 Adrenergic Receptor Density and Functional Responsiveness in Rat Brain. Ronald D. Johnson, P. Michael Livone and Kenneth P. Minneman ................................ 842
Characteristics of 1-Methyl-4-(2'-Methylphenyl)-1,2,3,6-Tetrahydrodpyridine-Induced Neurotoxicity in the Mouse. Patricia K. Somsalla, Stephen K. Youngster, M. Victoria Kindt and Richard E. Heikila ........................................................................................................ 850
Mitochondrial and Metabolic Toxicity of 1-Methyl-4-(2'-Methylphenyl)-1,2,3,6-Tetrahydrodpyridine. M. Victoria Kindt, Richard E. Heikila and William J. Nicklas ......................................... 858
In Vitro Vascular Relaxation by New Inotropic Agents: Relationship to Phosphodiesterase Inhibition and Cyclic Nucleotides. Raymond F. Kaufman, Kathryn W. Schenck, Barbara G. Vain, V. Gail Crowe and Marlene L. Cohen ................................................................................................. 864
Characterization of the Vasoactive Intestinal Peptide Receptor in Rat Submandibular Gland: Radioligand Binding Assay in Membrane Preparations. John T. Turner and David B. Bylund ...................................................................................................................... 873
In Rat Hippocampus, Somatostatin 14 and Muscarinic Receptor Ligands Modulate an Adenylate Cyclase Belonging to a Common Domain of the Receptor. Carola Eva and Erminio Costa .................................................................................................................. 888
Potentiation of the in Vitro T-Dependent Antibody Response by the B Subunit of Cholera Toxin. Jerry S. Campbell and Albert E. Munson ............................................................................... 895
3,4-Methylenedioxyamphetamine and 3,4-Methylenedioxyamphetamine Destroy Serotonin Terminals in Rat Brain: Quantification of Neurodegeneration by Measurement of [3H]Paroxetine-Labeled Serotonin Uptake Sites. George Battaglia, S. Y. Yeh, Elizabeth O’Hearn, Mark E. Molliver, Michael J. Kuhar and Errol B. De Souza ......................................................................................... 911
Individual Differences in Responsiveness to Single and Repeated Amphetamine Administration: Behavioral Characteristics and Neurochemical Correlates. David S. Segal and Ronald Kuczenaki .......................................................................................................................... 917
Selective Gastric Antileges Properties of Rioprostil, a Prostaglandin E1 Analog, in Rats and Dogs. L. B. Katz, D. A. Shriver, A. J. Tobia and M. E. Rosenthal .................................................... 927
Ca++ Utilization in the Constriction of Rat Aorta to Stimulation of Protein Kinase C by Phorbol Dibutyrate. Andrew T. Chiu, Jeffrey M. Bozarth, Mark S. Forysthe and Pieter B. M. W. M. Timmermans ......................................................................................................................... 934
Mechanisms Mediating the Positive Inotropic and Chronotropic Changes Induced by Dopexamine in the Anesthetized Dog. Alan S. Bass, Jai D. Kohli, Nathan Lubbers and Leon I. Goldberg .......................................................................................................................... 940
Characterization of D-2 Dopamine Receptors in a Tumor of the Rat Anterior Pituitary Gland. Christopher Lin, Paul McGonigle and Perry B. Molinoff ............................................................................ 950
Binding, Degradation and Pressor Activity of Angiotensins II and III after Aminopeptidase Inhibition with Amastatin and Bestatin. Raymond H. Abhold, Margaret J. Sullivan, John W. Wright and Joseph W. Harding .................................................................................................................. 957

Contents Continued on iv
Contents continued from iii

Neurochemical Actions of Anesthetic Drugs on the γ-Aminobutyric Acid Receptor-Chloride Channel Complex. J. Pablo Huidobro-Toro, Virginia Bleck, Andrea M. Allen and R. Adron Harris ............................................... 963


Effects of A23187, Exogenous Phospholipase A2 and Exogenous Arachidonic Acid on Pulmonary Vascular Resistance in Isolated Rabbit Lung. George A. Raschack, Gary E. Brown, David M. Broadbent and Mark S. Langer ............ 974

Solubilization with Digitonin Alters the Kinetics of Pirenzepine Binding to Muscarinic Receptors from Rat Forebrain and Heart. Jian-Xin Wang, Lin Mei, Henry I. Yamamura and William R. Roeseke ........................................... 981

Thermodynamic Analyses of Pirenzepine Binding to Membrane-Bound and Solubilized Muscarinic Receptors from Rat Forebrain and Heart. Lin Mei, Jian-Xin Wang, William R. Roeseke and Henry T. Yamamura ............ 991

Bupivacaine and Lidocaine Blockade of Calcium-Mediated Slow Action Potentials in Guinea Pig Ventricular Muscle. Dennis E. Coyle and Nicholas Sperelakis ......................... 1001

Selective Ganglionic Blockade of Vagal Inputs to Sinoatrial and/or Atrioventricular Regions. Janis D. Fee, Walter C. Randall, Robert D. Wurster and Jeffrey L. Ardell .................. 1006


Characteristics and Distribution of Specific Binding Sites for Leukotriene C4 in Human Bronchi. Maurizio Civelli, Daniela Oliva, Maurizio Mezzetti and Simonetta Nicosia ............... 1019

Comparative Analysis of Beta-1 Adrenoceptor Agonist and Antagonist Potency and Selectivity of Ciloprolol, Xamoterol and Pindolol. Peter E. Hicks, Icilio Cavero, Philippe Manoury, Françoise Lefèvre-Borg and Salomon Z. Langer .......................................................... 1025

Effects of L-652,731, a Platelet-Activating Factor (PAF) Receptor Antagonist, on PAF- and Complement-Induced Pulmonary Hypertension in Sheep. Barry W. Smallbone, Nancy E. Taylor and John W. D. McDonald .......... 1035


Diuretic Effect Induced by Intrarenal Infusion of Pinacidil in Anesthetized Dogs. Shiro Morimoto, Yasuo Matsumura, Yasuto Sasaki, Toshio Takakuwa and Masaki Kageyama .............. 1050

Interaction between Neuronal Uptake Inhibitors and Presynaptic Serotonin Autoreceptors in Rat Hypothalamic Slices: Comparison of K* and Electrical Depolarization. Francesca Passarelli, Anne-Marie Galzin and Salomon Z. Langer ...................................................... 1056

Adenosine Inhibits Immunoglobulin E-Dependent Histamine Secretion from Human Basophil Leukocytes by Two Independent Mechanisms. Philip J. Hughes, R. Christopher Benyon and Martin K. Church .......... 1064

Contribution of Substance P to Heat-Induced Edema in Rat Paw. Norifumi Yonehara, Tooru Shibutani and Reizo Inokai .................. 1071

Pharmacological Analysis of the Cardiac Actions of Xamoterol, a Beta Adrenoceptor Antagonist with Partial Agonistic Activity, in Guinea Pig Heart: Evidence for Involvement of Adenylate Cyclase System in Its Cardiac Stimulant Actions. Yuichi Hattori, Ichiro Sakuma, Yasuo Nakao and Morio Kanno .......... 1077

Impairment of the Extraneuronal O-Methylating System of Isoproterenol by Stop-Flow Ischemia in the Perfused Rat Heart. Masafumi Inoue, Keijoh Hifumi, Kazuyoshi Kirahashi and Motohatsu Fujiwara .......................... 1086

Effects of (−)-Desmethylxeperamil on Heart and Vascular Smooth Muscle. Hermann Nawrath and Manfred Raschack ............................................. 1090

Effects of Ethanol on Electrophysiological Properties of Rat Skeletal Myotubes in Culture. Chaya Brodie and S. R. Sampson .................. 1098


Inhibition of Ischemia-Induced Subcellular Redistribution of Lyosomal Enzymes in the Perfused Rat Heart by the Calcium Entry Blocker, Diltiazem. Kazuo Ichihara, Takashi Haneda, Sokichi Onodera and Yasushi Abiko ........... 1109

Effect of Lidocaine on the Myocardial Acidosis Induced by Coronary Artery Occlusion in Dogs. Naomi Matsumura, Hisao Matsamura and Yasushi Abiko .......................................................... 1114

Palytoxin-Induced Contraction and Release of Prostaglandins and Noradrenaline in the Aorta. Hiromi Nagase and Hideaki Karaki ............................................. 1120

Protective Effects of Bepridil on Calcium Injury of Anoxic Myocytes Isolated from Adult Rat Heart Ventricular Muscle. C. Cruz, A. Zouzai, G. Berson and A. Younes .................. 1126

Inhibition of Mitochondrial β-Oxidation of Fatty Acids by Pirprofen. Role in Micr...