CONTENTS

Canine Pulmonary Artery Contains a Homogeneous Population of Alpha-1 Adrenoceptors. James R. Docherty and Robert R. Ruffolo, Jr. .......................................................... 479


Stereoselectivity of Steroid Oxidation in Microsomes and in Purified Cytochrome P-450 Enzymes from Rat Liver. Gary L. Foureman, Craig Harris, F. Peter Guengerich and John R. Bend ......................................................... 492


Targeting Small Unilamellar Liposomes to Hepatic Parenchymal Cells by Dose Effect. Donald D. Chow, Herbert E. Esien, Millind M. Padki and Karl J. Hwang ......................................................... 506

K+ Channel and Adenylate Cyclase Involvement in Regulation of Ca2+-Evoked Release of [3H]Dopamine from Synaptosomes. John F. Bowyer and Norman Weiner ......................................................... 514

Effects of Acute and Chronic Clozapine and Haloperidol on in Vitro Release of Acetylcholine and Dopamine from Striatal and Nucleus Accumbens. David R. Compton and Kenneth M. Johnson ......................................................... 521

Uptake of Nephrotoxic S-Conjugates by Isolated Rat Renal Proximal Tubular Cells. Lawrence H. Lash and M. W. Anders ......................................................... 531

Glucose Utilization in the Rat Brain during Chronic Morphine Treatment and Naloxone-Precipitated Morphine Withdrawal. Alane S. Kimes and Edythe D. London ......................................................... 538

Environmental Determinants of Enhanced Sensitivity to the Behavioral Effects of Naltrexone. Philip H. Warren and W. H. Morse ......................................................... 546

Electrophysiological Effects of ACC-9358, a Novel Class I Antiarrhythmic Agent, on Isolated Canine Purkinje Fibers and Ventricular Muscle. Barry S. Brown ......................................................... 552

Platelet-Activating Factor-Induced Phospholipid Metabolism in Differentiated U-937 Cells in Culture. Giovanni Barzaghi, Henry M. Sarau and Seymour Mong ......................................................... 559


Evidence for Muscarinic Inhibitory Neurotransmission in Rodent Small Intestine. Thomas V. Nowak, Bonnie Harrington and John H. Kalbfleisch ......................................................... 573

Kinetic and Pharmacologic Analysis of [3H]Leukotriene E1, Binding to Receptors on Guinea Pig Lung Membranes: Evidence for Selective Binding to a Subset of Leukotriene D, Receptors. David Aharon, Carol A. Catanese and Ron C. Falcone ......................................................... 581

Xanthine Effects on Renal Proximal Tubular Function and Cyclic AMP Metabolism. Richard Coulson and Steven J. Scheinman ......................................................... 589


Kinetics of Chlorpromazine Block of Sodium Channels in Single Guinea Pig Cardiac Myocytes. Nobukuni Ogata, Masao Nishimura and Toshio Narahashi ......................................................... 605

Uptake and Hormonally Induced Hydrolysis of [3H]Phosphatidyl Choline in the Isolated Rabbit Heart. M. T. Wei and K. U. Malik ......................................................... 614

Pharmacological Characterization of Rat Retinal Dopamine Receptors. Zhi-Xiang Qu, Richard Fertel, Norton H. Neff and Maria Hadjiconstantinou ......................................................... 621

Castration Blocks Chronic Sulphiride-Induced Desensitization of Striatal D, Receptor-Stimulated Adenylate Cyclase Activity in Male Rats. Therese Ryan-Jaastrow and Margaret E. Gnegy ......................................................... 626

Cardiac Hypertrophy Induced by Thyroid Hormone is Independent of Loading Conditions and Beta Adrenoceptor Blockade. John B. Bedotto, Richard G. Gay, Scott D. Graham, Eugene Morkin and Steven Goldman ......................................................... 632

Studies on Inhibition of Angiotensin II Receptors in Rabbit Adrenal and Aorta. Robert G. Pendleton, George Gesner and Eugene Horner ......................................................... 637

Effects of Low Extracellular Chloride on Dopamine Release and the Dopamine Transporter. Pamela A. Diliberto, Roger A. Jefferis and Luigi X. Cubeddu ......................................................... 644

Contrasting Effects of Verapamil and Nifedipine on pH of Ischemic Myocardium in the Dog. Young Moo Ro, David R. Markle, Seth R. Goldstein, Edith Speir, Rodney Greene, Kenneth Steadman, Roger Aamodt, Stephen E. Epstein and Randolph E. Patterson ......................................................... 654

Contents Continued on iv
Contents Continued from iii

Pharmacological Characterization of the M1, Muscarinic Receptors Expressed in Murine Fibroblast B82 Cells. Lin Mei, Josephine Lai, William R. Roeseke, Claire M. Fraser, J. Craig Venter and Henry I. Yamamura .................................................. 661

Effect of Aromatic Fluorine Substitution on the Alpha and Beta Adrenoceptor-Mediated Effects of 3,4-Dihydroxytolazoline in the Pithed Rat. Andrew J. Nichols, A. Hamada, A. Adejare, Duane D. Miller, Popat N. Patil and Robert R. Ruffolo, Jr. .................................................... 671


Cholinergic Stimulation of Phosphoinositide Hydrolysis in Renal Medullary Collecting Duct Cells. Shari McArdle and Lal C. Garg .......................................................... 682

Interactions of Light and Sodium Nitrite in Producing Relaxation of Rabbit Aorta. Kazuki Matsunaga and Robert F. Furchgott ................................................................. 687

Block of "Ca Uptake into Synaptosomes by Methylmercury: Ca++- and Na+-Dependence. Timothy J. Shafer and William D. Atchison ...... 696

Influence of Stimulators and Inhibitors of Cyclic Nucleotides on Lower Esophageal Sphincter. Satish Rattan and Chafiq Moumni ..................... 703

Effects of Ouabain on the Concentration of Free Cytosolic Ca++ and on Contractility in Cultured Rat Cardiac Myocytes. Haifa Hallaq, Yoanathan Hasin, Ruhama Fixler and Yael Eliam ..... 716


Veratrine-Induced Decrease of (Na++ + K+-) Adenosine Triphosphatase Activity in Rat Brain Slices. Toshiro Matsuda and Heitohar Iwata ................................................. 729

An Investigation of the Effects of Intravenous Injection of the 5-Hydroxytryptamine, Receptor Antagonists Ketanserin and LY 53857 on Blood Pressure in Anesthetized Spontaneously Hypertensive Rats. James R. Docherty ........... 736

Tertatolol Increases Glomerular Filtration and Urinary Sodium in Anesthetized Rats. G. E. Plante, C. Prévost, P. Sirois, C. Rochat and J. F. Frost ............................................ 741

Pharmacokinetic Patterns of Repeated Administration of Antidepressants in Animals. II. Their Relevance in a Study of the Influence of Clozapine on Morphine Analgesia in Mice. Joseph Fialip, Hélène Marty, Marie-Claire Makambila, Marie-Ange Clain and Alain Eschalier .................................................. 747

Effects of Alpha Adrenoceptor Blockade on Renal Nerve Stimulation-Induced Norepinephrine Release and Vasostenconstriiction in the Dog Kidney. Hiroaki Hisa, Seiichi Araki, Yuichi Tomura, Yoshihara Hayashi and Susumu Satoh .......................................................... 752

Regulation of Rat Uterine Steroid Receptors by Nomegestrol Acetate, a New 19-Nor-Progesterone Derivative. Jacqueline Botella, Igor Duc, Remi Delansorne, Jacques Paris and Brahim Lahlou 758

Nitroglycerin-Induced Tolerance Multiple Sites in the Organic NitroGene Bioconversion Cascade. Peter J. Henry, John D. Horowitz and William J. Louis .............. 762


Relaxant Effect of N-Formyl-Methionyl-Leucyl-Phenylalanine on Rabbit Vascular Strips. Claude Laplante, Brigitte Tremblay and François Mareau .............................................. 774

Effect of Alpha-1 Acid Glycoprotein, Albumin and Palmitic Acid on the Brain and Salivary Gland Extraction of Warfarin in Rats. S. Urien, D. Morin and J. P. Tillement ....................................... 781

Effects of Acute and Chronic Prenatal Nicotine Treatment on Central Catecholamine Systems of Male and Female Rat Fetuses and Offspring. U. Ribary and W. Lichtensteiger .... 786

Stimulation of Gastric Alkaline Secretion by Histamine in Rats: Possible Involvement of Histamine H2-Receptors and Endogenous Prostaglandins. Hideyuki Nishiwaki, Koji Takeuchi, Megumu Okada, Hironori Tanaka and Susumu Okabe .................................................. 791

Possible Mechanism for the Inhibition of Gastric (H+ + K+)-Adenosine Triphosphatase by the Proton Pump Inhibito AG-1749. Hideaki Nagaya, Hiroshi Satoh, Keiji Kubo and Yoshikata Maki .................. 799

Antiserotonin and Antinulcear Activities of a Novel Proton Pump Inhibitor AG-1749 in Dogs and Rats. Hiroshi Satoh, Nobuhiro Inatomi, Hideaki Nagaya, Ikuko Inada, Akira Nohara, Nobuto Nakamura and Yoshikata Maki .......... 806

Involvement of Calcium Gene-Related Protein in the Positive Chronotropic and Inotropic Effects of Piperine and Development of Cross-Tachyphylaxis between Piperine and Capsaicin in the Isolated Rat Atria. Takashi Miyachi, Tomohisa Ishikawa, Yasuro Sugishita, Akira Saito and Katsutoshi Goto 816

Effects of Continuous Infusion of Cholinergic Drugs on Mental Depression in Rats with Basal Forebrain Lesions. Masamichi Nishiyama, Shigeiko Faruhi, Akino Nagaoka and Joseph T. Coyle 821

Role of Sulphid oxide in Mucosal Injury Caused by Ethanol: Relation to Microvascular Permeability, Gastric Motility and Cytoprotection. Koji Takeuchi, Megumu Okada, Hiromichi Niida and Susumu Okabe .......... 836

Toxic Effects of Potential Environmental Neurotoxins Related to 1-Methyl-4-Phenylpyridinium on Cultured Rat Dopaminergic Neurons. Patrick P. Michel, Bhuvaneswari K. Dandapani, Juan Sanchez-Ramos, Simon Efange, Berton C. Presman and Franz Hefti ............ 842


Contents Continued on v
Striatal Tachykinin Gene Expression Regulated by Interaction of D-1 and D-2 Dopamine Receptors. Doris M. Haverstick, Andrew Rubenstein and Michael J. Bannon .................................................. 858


Mechanism of Protective Effects of Ca** Channel Blockers on Energy Deprivation Contracture in Cultured Ventricular Myocytes. Osami Kohimoto and William H. Barry ........................................ 871

Responses of Substantia Nigra Pars Reticulata Neurons to Benzodiazepine Ligands after Acute and Prolonged Diazepam Exposure. I. Modulation of γ-Aminobutyric Acid Sensitivity. M. A. Wilson and D. W. Gallager ............. 879

Responses of Substantia Nigra Pars Reticulata Neurons to Benzodiazepine Ligands after Acute and Prolonged Diazepam Exposure. II. Modulation of Firing Rate. M. A. Wilson and D. W. Gallager .......................... 886