CONTENTS

Canine Pulmonary Artery Contains a Homogeneous Population of Alpha-1 Adrenoceptors. James R. Docherty and Robert R. Ruffolo, Jr. ......................................................... 479
Stereoselectivity of Stereose 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
Toxicity of the HMG-Coenzyme A Reductase Inhibitor, Lovastatin, to Rabbits. Douglas J. Kornbrust, James S. MacDonald, Chennekatu F. Peter, Donald M. Duchai, R. John Stubbs, John I. Gernershausen and Alfred W. Alberts .................................................. 498
Targeting Small Unilamellar Liposomes to Hepatic Parenchymal Cells by Dose Effect. Donald D. Chow, Herbert E. Basien, Milind M. Padki and Karl J. Hwang ......................................................................... 506
K+ Channels 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 Striatum and Nucleus Accumbens. David R. Compton and Kenneth M. Johnson .................................................. 521
Uptake of Nephotoxic 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 E4 Binding to Receptors on Guinea Pig Lung Membranes: Evidence for Selective Binding to a Subset of Leukotriene D4 Receptors. David Arhony, Carol A. Cataneve 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. Weis and K. U. Malik .................................................................................................................. 614
Pharmacological Characterization of Rat Retinal Dopamine Receptors. Zhi-Xiang Qu, Richard Fertel, Norton H. Neff and Maria Hadjiconstantineu .................................................................................. 621
Castration Blocks Chronic Sulpiride-Induced Desensitization of Striatal D1 Receptor-Stimulated Adenylate Cyclase Activity in Male Rats. Therese Ryan-Jastrow and Margaret E. Greagy .................................................................................................................. 626
Cardiac Hypertrophy Induced by Thyroid Hormone Is Independent of Loading Conditions and Beta Adrenergic Blockade. John E. 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. Jeffs 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
Pharmacological Characterization of the M₃ Muscarinic Receptors Expressed in Murine Fibroblast B82 Cells. Lin Mei, Josephine Lat, 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-Dihydroxytyramine in the Pithed Rat. Andrew J. Nicholls, A. Hamada, A. Adejare, Duane D. Miller, Popat N. Patil and Robert R. Ruffolo, Jr. ............................................................. 671

[Arg²-n-Phe⁷]-Substituted Bradykinin Analogos Inhibit Bradykinin- and Vasopressin-Induced Contractions of Uterine Smooth Muscle. Stephen G. Farmer, Ronald M. Burch, Christopher J. Dehaas, James Togo and Larry R. Steranka .................................................. 677

Cholinergic Stimulation of Phosphoinositol 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 Ca²⁺ Uptake into Synaptosomes by Methylmercury: Ca²⁺- 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 Chafl Moumn ........................................................................... 703

Effects of Ouabain on the Concentration of Free Cytosolic Ca²⁺ and on Contractility in Cultured Rat Cardiac Myocytes. Haifa Hallaq, Yonathan Hasin, Ruhama Fixler and Yael Eilam ............................................................. 716


Veratrine-Induced Decrease of (Na⁺ + K⁺)-Adenosine Triphosphatase Activity in Rat Brain Slices. Toshio Matsuda and Heitaroh 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 Clomipramine on Morphine Analgesia in Mice. Joseph Fialip, Hélène Marty, Marie-Claire Makambila, Marie-Ange Claisen and Alain Eschalier ............................................................. 747

Effects of Alpha Adrenoceptor Blockade on Renal Nerve Stimulation-Induced Norepinephrine Release and Vasocostriction in the Dog Kidney. Hiroaki Hisa, Seiichi Araki, Yuichi Tomura, Yoshiharu 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 Lahhou ............................................................. 758

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

Vasorelaxing Effects of Prostaglandin I₂ on the Canine Basilar and Coronary Arteries. Hiroaki Shirahase, Hachiro Usui, Katajiro Manabe, Kazuyoshi Kurahashi and Motohatsu Fujiwara ............................................................. 769

Relaxant Effect of N-Formyl-Methionyl-Leucyl-Phenylalanine on Rabbit Vascular Strips. Claude Laplante, Brigitte Tremblay and François Marceau ............................................................. 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 ............................................................. 793

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

Antisecretory and Antiulcer 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 Yoshitaka Maki ............................................................. 806

Involvement of Calcitonin Gene-Related Peptide 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, Yasuho Sugishita, Akira Saito and Katush steiho Goto ............................................................. 816

Effects of Continuous Infusion of Cholinergic Drugs on Memory Impairment in Rats with Basal Forebrain Lesions. Massomi Miyamoto, Shigehiko Narumi, Akinobu Nagaoka and Joseph T. Coyle ............................................................. 825

Role of Sulfhydryls 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. Pressman 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 Kohmoto 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