In Vivo Studies on Spinal Opiate Receptor Systems Mediating Antinociception. I. Mu and Delta Receptor Profiles in the Primate. T. L. Yaksh .................................................. 303
Behavioral Effects of Buprenorphine and Diprenorphine under a Multiple Schedule of Food Presentation in Squirrel Monkeys. Linda A. Dykstra ........................................... 317
Calcium and Calmodulin Antagonists Binding to Calmodulin and Relaxation of Coronary Segments. J. David Johnson and Douglas A. Fugman .................................................. 330
Ischemia-Induced Enhancement of Digitalis Sensitivity in Isolated Guinea-Pig Heart. Dong-Hee Kim, Tai Akera and Richard H. Kennedy ........................................................... 335
Relationships between Choline Uptake, Acetylcholine Synthesis and Acetylcholine Release in Isolated Rat Atria. Glenn T. Wetzel and Joan Heller Brown ........................................ 343
Pentobarbital Causes Cardiorespiratory Depression by Interacting with a GABAergic System at the Ventral Surface of the Medulla. Kathryn A. Yamada, Joseph M. Moerschbaecher, Paul Hamosh and Richard A. Gillis .................................................. 349
Centrally Mediated Inhibition of Small Intestinal Transit and Motility by Morphine in the Rat. James J. Galligan and Thomas F. Burks ........................................................... 356
Effects of Chronic Administration of Mestranol on Alpha and Beta Adrenergic Responsiveness in Female Rats. K. T. Shiverick, K. Hutchins, D. C. Kitka, N. Squires and M. J. Fregly 362
Inhibition of Na+ Influx and DNA Synthesis in Human Fibroblasts and Neuroblastoma-Glioma Hybrid Cells by Amiloride Analogos. Martha E. O'Donnell, Edward Cragoe, Jr. and Mitchel L. Villereal .................................................. 368
Ethanol-Induced Disordering of Membranes from Different Age Groups of C57BL/6NNIA Mice. H. James Armbrrecht, W. Gibson Wood, Ronald W. Wise, Judy B. Walsh, Britt N. Thomas and R. Strong .................................................. 387
[3H]Nicotine Binding in Rat Brain: Alteration after Chronic Acetylcholinesterase Inhibition. Lucio G. Costa and Sheldon D. Murphy .................................................. 392
Pharmacological Characterization of Substance P-Induced Nociception in Mice: Modulation by Opioid and Noradrenergic Agonists at the Spinal Level. Janice L. K. Hylden and George L. Wilcox .................................................. 398
Interaction between the Effects of Intragastric Meals and Drugs on Feeding in Rhesus Monkeys. Richard W. Foltin and Charles R. Schuster .................................................. 405
Effects of Psychomotor Stimulants, Alone and in Pairs, on Milk Drinking in the Rat after Intraperitoneal and Intragastric Administration. Richard W. Foltin, William L. Woolverton and Charles R. Schuster .................................................. 411
Effect of Dopamine Agonists on \( \gamma \)-Aminobutyric Acid (GABA) Turnover in the Superior Colliculus: Evidence that Nigroctectal GABA Projections Are Under the Influence of Dopaminergic Transmission. Maria Rosaria Melis and Karen Gale .................................................. 425
Differential Sensitivity of Hypothalamic Norepinephrine and Striatal Dopamine to Catecholamine-Depleting Agents. Glenn S. Takimoto, James D. Stittsworth, Jr., Bruce R. Bianchi and Janet K. Stephens .................................................. 432
Behavioral Effects of the Optical Isomers of Methadone in the Rat during Acute and Chronic Administration. L. A. Raitano and D. E. McMillan .................................................. 440
Effects of Chronic Phenycyclidine Administration on the Schedule-Controlled Behavior of Rats. M. J. Brocco, S. K. Rastogi and D. E. McMillan .................................................. 449

Contents Continued on w
Production of Prostaglandin E2 and F2α in the Freshwater Mussel *Ligumia subrotata*: relation to Sodium Transport. David G. Saintsing, Daniel H. Hwang and Thomas H. Dietz .......................... 455

SCH 23390, a Potential Benzazepine Antipsychotic with Unique Interactions on Dopaminergic Systems. Louis C. Iorio, Allen Barnett, Frederick H. Leitz, Vincent P. Houser and Chryzanta A. Korduba ......................................................... 462

Evaluation of the Adrenergic Effects of a Novel Optically Active Catecholamidine in *Vitro* and *In Vivo*: Differential Application of the Easson-Stedman Hypothesis to *Alpha* and *Beta* Adrenoceptors. Robert R. Ruffolo, Jr., Jon W. Banning, Popat N. Patil, Akihiko Hamada and Duane D. Miller .................................................. 469

Spinal Serotonin (5-HT) Receptor Subtypes and Nociception. Frank P. Zemlan, Lee-Ming Kow and Donald W. Pfaff .................................................. 477


Erythropoietic Effects of Prostacyclin (PGI2) and Its Metabolite 6-Keto-Prostaglandin (PG)E1. Peter Kim Nelson, Jesse Brookins and James W. Fisher .................. 493

Inhibitory Effects of Anthracenedione Antineoplastic Agents on Hepatic and Cardiac Lipid Peroxidation. Evan D. Kharasch and Raymond F. Novak .......................... 500

Effects of Met-Enkephalin on the Substance P-Ergic and Cholinergic Responses in the Rabbit Iris Sphincter Muscle. Naoko Ueda, Ikunobu Muramatsu, Haruki Hayashi and Motohatsu Fujiwara .................................................. 507


Correlation between Cholinesterase Inhibition and Reduction in Muacarinic Receptors and Choline Uptake by Repeated Disopropylfluorophosphate Administration: Antagonism by Physostigmine and Atropine. Shizuo Yamada, Mitsutaka Isogai, Hiromi Okudaira and Eiichi Hayashi .................................................. 519

Chlordiazepoxide Reduces *In Vivo* Serotonin Release in the Basal Ganglia of Encephale Isol#{233} but Not Anesthetized Cats: Evidence for a Dorsal Raphe Site of Action. Philippe Soubrie, Catherine Blas, André Ferron and Jacques Glowni .......................... 526

Glucuronidation in Isolated Perfused Rat Intestinal Segments after Mucosal and Serosal Administration of 1-Naphthol. Andries Sj. Koster and Jan Noordhoek .......................... 533

Effect of Liposome Size and Drug Release Properties on Pharmacokinetics of Encapsulated Drug in Rats. T. M. Allen and J. M. Everest .................................................. 539


Pharmacology and Regional Variations of Quinolinic Acid-Evoked Excitations in the Rat Central Nervous System. M. N. Perkins and T. W. Stone .................................................. 551


Quantitative Aspects of *Alpha* Adrenergic Effects Induced by Clonidine-Like Imidazolizines. III. Comparison of Central and Peripheral *Alpha*-1 and *Alpha*-2 Adrenoceptors. A. de Jonge, P. B. M. W. M. Timmermans and P. A. van Zwieten .................................................. 565

Demonstration of an *Alpha* Adrenoceptor-Mediated Inotropic Effect of Norepinephrine in Rabbit Papillary Muscle. Halfdan Aas, Tor Skomedal and Jan-Bjorn Oanes .................................................. 572


Mammalian Tissue Acetylsalicylic Acid Esterase(s): Identification, Distribution and Discrimination from Other Esterases. Basheer Ali and Swaraj Kaur .................................................. 589

Effects of 1-(4-Nitrophenyl)-2-Isopropylaminoethanol (INPEA) and Propranolol and Their Dextro-Isomers on Hemodynamic and Metabolic Responses to Isoproterenol in Dogs. Tai-Ichi Nishimura, Shin-Ichi Kita and Yasushi Abiko .................................................. 595

Suppression of Lymphatic Vessel Contractility with Inhibitors of Arachidonic Acid Metabolism. Miles G. Johnston and Cathy Feuer .................................................. 603


Biphasic Effects of Baclofen on Phrenic Motoneurons: Possible Involvement of Two Types of γ-Aminobutyric Acid (GABA) Receptors. Peter M. Lalley .................................................. 616

Anti-Inflammatory and Antiarthritic Evaluation of Acetaminophen and Its Potentiation of Tolmetin. S. Wong and J. F. Gardocki .................................................. 625

Erratum .................................................. 632