

## CONTENTS

<b>Inhibition of Calmodulin by Phenothiazines and Related Drugs: Structure-Activity Relationships.</b> Walter C. Prozialeck and Benjamin Weiss .....	509
<b>Pharmacological Studies on Sympathoinhibition Produced by the Medial Medullary Depressor Region: Proposed <math>\gamma</math>-Aminobutyric Acid Involvement in Inhibition of Somatosympathetic Reflexes.</b> David G. Taylor, Kristina A. Taylor and Michael J. Antonaccio .....	517
<b><i>Trans</i>-Stilbene Oxide Administration Increased Hepatic Glucuronidation of Morphine but Decreased Biliary Excretion of Morphine Glucuronide in Rats.</b> Carolyn Fuhrman-Lane and James M. Fujimoto .....	526
<b>Effect of Treatment of Rats with Antidepressants on Melatonin Concentrations in the Pineal Gland and Serum.</b> William E. Heydorn, David J. Brunswick and Alan Frazer .....	534
<b>Stimulation on Fibrinolytic Activity in Human Skin Fibroblasts by Prostaglandins E<sub>1</sub>, E<sub>2</sub> and I<sub>2</sub>.</b> David J. Crutchley, Lobella B. Conanan and James R. Maynard .....	544
<b>Inhibition of Acetylcholine Turnover Rate in Rat Hippocampus and Cortex by Intraventricular Injection of Adenosine Analogs.</b> T. F. Murray, William D. Blaker, D. L. Cheney and E. Costa .....	550
<b>Characteristics of Adrenoceptors in a Nociceptive Pathway in the Mesencephalic Reticular Formation of the Rat.</b> Timothy P. O'Neill and Henry J. Haigler .....	555
<b>Cerebral Blood Vessels: Effects of Exogenous Acetylcholine and Field Stimulation on Norepinephrine Release.</b> Sue Piper Duckles and Carolyn D. Kennedy .....	562
<b>Influence of Adrenocorticotropin Hormone and Yohimbine on Antidepressant-Induced Declines in Rat Brain Neurotransmitter Receptor Binding and Function.</b> D. A. Kendall, R. Duman, J. Slopis and S. J. Enna .....	566
<b>Benzoate-Induced Changes in Glycine and Urea Metabolism in Patients with Chronic Renal Failure.</b> William E. Mitch and Saul Brusilow .....	572
<b>3,4-Diaminopyridine Alters Acetylcholine Metabolism and Behavior during Hypoxia.</b> Christine Peterson and Gary E. Gibson .....	576
<b>Suppression of Histamine-Induced Adrenocorticotrophic Hormone Release by Antihistamines and Antidepressants.</b> Margaret A. Reilly and Ernest B. Sigg .....	583
<b>Interactions of Phenobarbital with Propranolol in the Dog. 1. Plasma Protein Binding.</b> Stephen A. Bai and Fred P. Abramson .....	589
<b>Mechanism of the Clonidine-Induced Protection against Acetylcholinesterase Inhibitor Toxicity.</b> Jerry J. Buccafusco .....	595
<b>Identification of the <i>Beta</i> Adrenergic Subtype on Astroglia Purified from Rat Brain.</b> T. Kendall Harden and Ken D. McCarthy .....	600
<b><i>Beta</i> Adrenergically Mediated Release of Renin in the Dog is not Confined to Either <i>Beta</i>-1 or <i>Beta</i>-2 Adrenoceptors.</b> Richard D. Olson, Alan S. Nies and John G. Gerber .....	606
<b>Evidence for the Existence of Peptide and Nonpeptide Morphine-Like Materials in Mouse Brain: Effect of an Analgesic Intracerebroventricular Dose of Acetylcholine on Their Levels.</b> Thuy T. Chau, Consuelo Izazola-Conde and William L. Dewey .....	612
<b>Analysis of the 2-Deoxy-D-Glucose-Induced Vagal Stimulation of Gastric Secretion and Gastrin Release in Dogs Using Methionine-Enkephalin, Morphine and Naloxone.</b> Wayne Anderson, E. Molina, J. Rentz and B. I. Hirschowitz ..	617
<b>Effect of Prostaglandins on Pancreatic Circulation in Anesthetized Dogs.</b> T. Homma and K. U. Malik .....	623
<b>Solubilization and Characterization of Active Opiate Binding Sites from Mammalian Brain.</b> Richard D. Howells, Theresa L. Gioannini, Jacob M. Hiller and Eric J. Simon .....	629
<b>Role of Autoregulation in the Beneficial Action of Propranolol on Ischemic Blood Flow Distribution and Stenosis Severity in the Canine Myocardium.</b> Garrett J. Gross, James D. Buck, David C. Warltier and Harold F. Hardman .....	635
<b>Biochemical Evidence for Pulmonary Endothelial Cell Injury after Carbon Tetrachloride Administration in Mice.</b> Manfred A. Hollinger .....	641
<b>Stereochemical Requirements of <i>Alpha</i>-2 Adrenergic Receptors.</b> Robert R. Ruffolo, Jr., Emily L. Yaden and James E. Waddell .....	645

Contents Continued on iv

<b>Competitive Inhibition of 48/80-Induced Histamine Release by Benzalkonium Chloride and Its Analogs and the Polyamine Receptor in Mast Cells.</b> George W. Read, Steven M. Hong and Edgar F. Kiefer .....	652
<b>The Metabolism of Phenytoin by Isolated Hepatocytes and Hepatic Microsomes from Male Rats.</b> Masanabu Tsuru, Richard R. Erickson and Jordan L. Holtzman .....	658
<b>Effect of Increments in Norepinephrine Concentrations on Seizure Intensity in the Genetically Epilepsy-Prone Rat.</b> Kwang Ho Ko, John W. Dailey and Phillip C. Jobe .....	662
<b>Kindled Seizures Selectively Reduce a Subpopulation of [<sup>3</sup>H]Quinuclidinyl Benzilate Binding Sites in Rat Dentate Gyrus.</b> Daniel D. Savage and James O. McNamara .....	670
<b>Actions of Gabaergic Agents on Dopamine Metabolism in the Nigrostriatal Pathway of the Rat.</b> Paul L. Wood .....	674
<b>Pharmacological Evidence Favoring a Similarity between <i>Alpha</i> Adrenoceptors Mediating Sleep in Chicks and Cardiac Presynaptic <i>Alpha</i>-2 Receptors in Rats.</b> Alan G. Roach, Françoise Lefèvre-Borg, Roberto Gomeni and Icilio Caverio .....	680
<b>Mechanism of Action of Quinidine on Heart Rate in the Dog.</b> Claude Chassaing, Pierre Duchene-Marullaz and Monique Paire .....	688
<b>Effects of Nitroglycerin on Transmural Energy Metabolism in the Underperfused Canine Heart.</b> Makie Higuchi .....	694
<b>Chelation of Cadmium from Metallothionein <i>in Vivo</i> and Its Excretion in Rats Repeatedly Injected with Cadmium Chloride.</b> M. George Cherian and Karen Rodgers .....	699
<b>Quantitative Aspects of <i>Alpha</i> Adrenergic Effects Induced by Clonidine-Like Imidazolidines. I. Central Hypotensive and Peripheral Hypertensive Activities.</b> A. de Jonge, P. B. M. W. M. Timmermans and P. A. van Zwieten .....	705
<b>Quantitative Aspects of <i>Alpha</i> Adrenergic Effects Induced by Clonidine-Like Imidazolidines. II. Central and Peripheral Bradycardic Activities.</b> A. de Jonge, P. B. M. W. M. Timmermans and P. A. van Zwieten .....	712
<b>Effect of Diltiazem, a Calcium Antagonist, on Myocardial pH in Ischemic Canine Heart.</b> Kazuo Ichihara and Yasushi Abiko .....	720
<b>Central Vasopressor Responses to Conjugated Estrogens in Rats May be Mediated <i>Via</i> a Renin-Angiotensin System in the Brain.</b> Hakuo Takahashi, Hiroshi Ashizawa, Kazuo Takeda, Seiichi Yoneda, Manabu Yoshimura and Hamao Ijichi ..	726
<b>Termination of Responses to Sympathetic Nerve Stimulation and to Noradrenaline in a Perfused Arterial Preparation: The Role of Neuronal and Extraneuronal Uptake.</b> Chi-Chung Chan and Stanley Kalsner .....	731
<b>Ornithine Decarboxylase and Polyamines in Tissues of the Neonatal Rat: Effects of <math>\alpha</math>-Difluoromethylornithine, a Specific, Irreversible Inhibition of Ornithine Decarboxylase.</b> T. A. Slotkin, F. J. Seidler, P. A. Trepanier, W. L. Whitmore, L. Lerea, G. A. Barnes, S. J. Weigel and J. Bartolome .....	741
<b>Impaired Development of Central and Peripheral Catecholamine Neurotransmitter Systems in Preweanling Rats Treated with <math>\alpha</math>-Difluoromethylornithine, a Specific, Irreversible Inhibitor of Ornithine Decarboxylase.</b> T. A. Slotkin, A. Grignolo, W. L. Whitmore, L. Lerea, P. A. Trepanier, G. A. Barnes, S. J. Weigel, F. J. Seidler and J. Bartolome .....	746
<b>The Potentiation of Cardiac Responses to Adenosine by Benzodiazepine.</b> Terry P. Kenakin .....	752
<b>Evidence for the Presynaptic Localization of a High Affinity Opiate Binding Site on Dopamine Neurons in the Pedal Ganglia of <i>Mytilus Edulis</i> (Bivalvia).</b> G. B. Stefano, R. S. Zukin and R. M. Kream .....	759
<b>Effects of DNA Synthesis Inhibitors on Post-Traumatic Glial Cell Proliferation.</b> Melvin L. Billingsley and H. George Mandel .....	765
<b>Inhibition of Respiratory Neural Discharges by Clonidine and 5-Hydroxytryptophan.</b> Donald R. McCrimmon and Peter M. Lalley .....	771
<b>Inhibition of High Affinity Choline Uptake in the Hippocampus: Studies on the Site of Pentobarbital Action.</b> Judith A. Richter and Joanne M. Gormley .....	778
<b>Erratum</b> .....	785
<b>Index, Volume 222, July–September, 1982</b> .....	787