

CONTENTS OF VOLUME 214

No. 1, July 1980

The Effect of Meclofenamate on Renal Blood Flow in the Unanesthetized Dog: Relation to Renal Prostaglandins and Sodium Balance. M. C. BLASINGHAM, R. E. SHADE, L. SHARE AND A. NASJLETTI	1
Effects of Clofibrate on Water Permeability and Short-Circuit Current of Toad Urinary Bladder. MARGARET M. TARPEY AND STANLEY A. MENDOZA	5
Coronary Arterial Relaxation and Guanylate Cyclase Activation by Cigarette Smoke, N'-Nitrosornicotine and Nitric Oxide. CARL A. GRUETTER, BARBARA K. BARRY, DENNIS B. MCNAMARA, PHILIP J. KADOWITZ AND LOUIS J. IGNARRO	9
Suprofen, A New Peripheral Analgesic. ROBERT J. CAPETOLA, DAVID A. SHRIVER AND MARVIN E. ROSENTHALE	16
Tissue Distribution and Biliary Excretion of Prostacyclin Metabolites in the Rat. B. M. TAYLOR AND F. F. SUN	24
A Model to Describe Myocardial Drug Disposition in the Dog. ROBERT E. KATES AND PATRICE JAILLON	31
Role of Extracellular Ca ⁺⁺ in Regulating Isoproterenol-Stimulated Phosphorylase α Formation in Murine Skeletal Muscle. STEPHEN R. GROSS AND RANDOLPH M. JOHNSON	37
The Cardiac Effects of Prostaglandins and Their Modification by the Prostaglandin Antagonist N-0164. GEOFFREY ALLAN AND ROBERTO LEVI	45
CI-845 (Pirfenol Hydrochloride): A New Orally Effective Long-Acting Antiarrhythmic Agent. T. J. STEFFE, T. E. MERTZ, S. G. HASTINGS, R. E. POTOCZAK AND H. R. KAPLAN	50
Effects of Caffeine on Anterior Pituitary and Thyroid Function in the Rat. E. SPINDEL, M. ARNOLD, B. CUSACK AND R. J. WURTMAN	58
Effects of Cannabinoids on Catecholamine Uptake and Release in Hypothalamic and Striatal Synaptosomes. MRINAL K. PODDAR AND WILLIAM L. DEWEY	63
Inhibition of Bronchoconstriction by Aerosols of Prostaglandins E ₁ and E ₂ . MARTIN A. WASSERMAN, ROBERT L. GRIFFIN AND FRANK B. MARSALISI	68
Influence of Indomethacin and Other Anti-Inflammatory Drugs on Mobilization and Production of Neutrophils: Studies with Carrageenan-Induced Inflammation in Rats. ALVAIR P. ALMEIDA, BARBARA M. BAYER, ZDENKA HORAKOVA AND MICHAEL A. BEAVEN	74
The Characterization of an Inhibitory Complex Formed with Cytochrome P-450 and a Metabolite of 1,1-Disubstituted Hydrazines. RONALD N. HINES AND RUSSELL A. PROUGH	80
Characterization of Cholestasis Induced by Estradiol-17 β -D-Glucuronide in the Rat. MARK MEYERS, WILLIAM SLIKKER, GARY PASCOE AND MARY VORE	87
Electrophysiological Effects of Norepinephrine on Slow Responses Induced in Isolated Canine Cardiac Purkinje Fibers by Reduced Extracellular pH. LARRY D. DAVIS AND PHYLLIS R. HELMER	94
HgCl ₂ Inhibition of D-Glucose Transport in Jejunal Tissue from 2 Day and 21 Day Chicks. DAVID S. MILLER, AHMED TAHIR SHEHATA AND JOSEPH LERNER	101
Active Uptake of Propranolol by Isolated Rabbit Alveolar Macrophages and Its Inhibition by Other Basic Amines. ROBERT E. VESTAL, DAVID M. KORNHAUSER AND DAVID G. SHAND	106
Dopamine Inhibits Burst Firing of Neurosecretory Cell R15 in <i>Aplysia californica</i> : Establishment of a Dose-Response Relationship. SIDNEY M. GOSPE, JR. AND WILKIE A. WILSON, JR.	112
Bradykinin Action on the Efflux of Luminal ²² Na in the Rat Nephron. MICHAEL L. KAUKER	119
Cannabinoids. I. Behavioral Effects. PAUL STARK AND P. B. DEWS	124
Cannabinoids. II. Cardiovascular Effects. PAUL STARK AND P. B. DEWS	131
Narcotic Discrimination in Pigeons. SEYMORE HERLING, EDWARD H. COALE, JR., RITA J. VALENTINO, DAVID W. HEIN AND JAMES H. WOODS	139
Dietary Protein Intake Influences the Antihypertensive Potency of Methylopa in Spontaneously Hypertensive Rats. ALAN F. SVED, IRENE M. GOLDBERG AND JOHN D. FERNSTROM	147
Studies on the β Adrenergic Receptors Mediating Inhibition of Antigen-Induced Histamine Release from the Lung and Heart Isolated from the Actively Sensitized Guinea Pig. S. K. WONG AND C. K. BUCKNER	152
Effects of Barbiturates on Inhibitory and Excitatory Responses to Applied Neurotransmitters in <i>Aplysia</i> . ILA L. COTE AND W. A. WILSON	161
Effects of an Orally Active Converting Enzyme Inhibitor (YS-980) on Renal Function in Dogs. YOUICHI ABE, KATSUYUKI MIURA, MASAHIRO IMANISHI, TOKIHITO YUKIMURA, TADAMITSU KOMORI, TAKESHI OKAHARA AND KENJIRO YAMAMOTO	166
Effects of High Potassium Concentrations and of Chloride Substitution on the Quinine-Induced Contractures of Frog Skeletal Muscle. G. SUAREZ-KURTZ, M. JOSEFINA BRAGA DA COSTA AND SOLANGE COUTINHO	171
Antidopaminergic Effect of Estrogens at the Striatal Level. CATHERINE EUVRARD, CLAUDE OBERLANDER AND JACQUES R. BOISSIER	179
Identity of [³ H]Dihydroalprenolol Binding Sites and β -2 Adrenergic Receptors Coupled with Adenylate Cyclase in Guinea-Pig Skeletal Muscle Sarcolemma: General Properties and Structure-Activity Relationships. JIANN-WU WEI AND PRAKASH V. SULAKHE	186
Anti-Inflammatory and Ulcerogenic Effects and Pharmacokinetics of Dexamethasone in Protein-Deficient Rats. D. R. VARMA AND S. MULAY	197
Possible Role of an Endogenous Opiate in the Cardiovascular Effects of Central α Adrenoceptor Stimulation in Spontaneously Hypertensive Rats. CSABA FARSANG, MARIA DOLORES RAMIREZ-GONZALEZ, LUCIA MUCCI AND GEORGE KUNOS	203

Mechanism of the Excitatory Action of Palytoxin and N-Acetylpalytoxin in the Isolated Guinea-Pig Vas Deferens. Y. OHIZUMI AND S. SHIBATA	209
Intragastric Self-Administration in the Rhesus Monkey: A Comparison of the Reinforcing Effects of Codeine, Phenacetin and Paracetamol. F. HOFFMEISTER, J. DYCKA AND K. RÄMSCH	213
Effects of Acetaldehyde upon Mechanical Properties of Isolated Rat Papillary Muscle. TSUNETARO SAKURAI, OSCAR H. L. BING, GARY HUBER AND WALTER H. ABELMAN	219
Selective Effects of Clonidine on the Canine Sinus Node. R. KIRBY PRIMM, FERDINAND ÜRTHALER AND THOMAS N. JAMES	223
Erratum	229

No. 2, August 1980

A Common Mechanism for Lysergic Acid, Indolealkylamine and Phenethylamine Hallucinogens: Serotonergic Mediation of Behavioral Effects in Rats. ROBERT S. SLOVITER, EUGENE G. DRUST, BRUCE P. DAMIANO AND JOHN D. CONNOR	231
Response to Adrenergic Agonists and Antagonists by Collateral Arteries from the Hind Limb of the Dog. PATRICIA B. WILLIAMS	239
Studies on the Reduction of Sputum Viscosity in Cystic Fibrosis Using an Orally Absorbed Protected Thiol. NINA FELICE TABACHNIK, CHARLES M. PETERSON AND ANTHONY CERAMI	246
Heme Metabolism in the Fetoplacental Unit and Neonatal Livers during Lactation: Effect of Gold Sodium Thiomalate. JULIE L. EISEMAN AND ALVITO P. ALVARES	250
Long-Term Effects of Multiple Doses of Methamphetamine on Tryptophan Hydroxylase and Tyrosine Hydroxylase Activity in Rat Brain. ADAIR J. HOTCHKISS AND JAMES W. GIBB	257
Characterization of the Clonidine Withdrawal Syndrome in the Normotensive Rat. PETER DiSTEFANO, GLENNON FOX AND EUGENE M. JOHNSON, JR.	263
Relationship between Hepatic Metabolism of Chlorpromazine and Cholestatic Effects in the Isolated Perfused Rat Liver. NICOLA TAVOLONI AND JAMES L. BOYER	269
Differential Inhibition of <i>Alpha</i> -1 and <i>Alpha</i> -2 Adrenoceptor-Mediated Pressor Responses in Pithed Rats. ISAMU YAMAGUCHI AND IRWIN J. KOPIN	275
The Effect of Phospholipase C on the Responsiveness of Cardiac Receptors. I. Inhibition of the Adrenergic Inotropic Response. JEAN F. REGAL AND F. E. SHIDEMAN	282
The Effect of Phospholipase C on the Responsiveness of Cardiac Receptors. II. The Specificity of Phospholipase C Inhibition of Receptor-Mediated Responses. JEAN F. REGAL AND F. E. SHIDEMAN	291
Atropine-Resistant Central Respiratory Stimulation by Bethanechol in Cats. SUSAN F. GONSALVES AND HERBERT L. BORISON	297
The Influence of Sodium Status and Furosemide on Canine Acute Amphotericin B Nephrotoxicity. J. F. GERKENS AND R. A. BRANCH	306
Mechanism of FANFT Cooxidation by Prostaglandin Endoperoxide Synthetase. TERRY V. ZENSER, MICHAEL B. MATTAMMAL AND BERNARD B. DAVIS	312
Lipophilic Drugs and Lipoproteins: Partitioning Effects on Chloroethylnitrosourea Reaction Rates in Serum. ROBERT J. WEINKAM, AMY FINN, VICTOR A. LEVIN AND JOHN P. KANE	318
The Effects of Xylamine, A Nitrogen Mustard on [³ H]Norepinephrine Accumulation in Rabbit Aorta. A. K. CHO, R. W. RANSOM, J. B. FISCHER AND R. C. KAMMERER	324
β -Endorphin: Central Sites of Analgesia, Catalepsy and Body Temperature Changes in Rats. L.-F. TSENG, E. T. WEI, H. H. LOH AND CHOH HAO LI	328
Effect of Morphine Sulfate on Intestinal Transit and Myoelectric Activity of the Small Intestine of the Rat. NORMAN W. WEISBRODT, STEPHEN E. SUSSMAN, JOHN J. STEWART AND THOMAS F. BURKS	333
Oral Phencyclidine (PCP) Self-Administration in Rhesus Monkeys: Effects of Feeding Conditions. MARILYN E. CARROLL AND RICHARD A. MEISCH	339
Electrophysiologic Actions of UM-272 (Pranolium) on Reentrant Ventricular Arrhythmias in Postinfarction Canine Myocardium. JOHN K. GIBSON AND BENEDICT R. LUCCHESI	347
Chlorpromazine Effects on Cocaine-Reinforced Responding in Rhesus Monkeys: Reciprocal Modification of Rate-Altering Effects of the Drugs. SEYMORE HERLING AND JAMES H. WOODS	354
Prolactin Releasing Potencies of Antipsychotic and Related Nonantipsychotic Compounds in Female Rats: Relation to Clinical Potencies. SALLY E. HAYS, RUSSELL E. POLAND AND ROBERT T. RUBIN	362
Inotropic Actions of Doxorubicin in Isolated Guinea-Pig Atria: Evidence for Lack of Involvement of Na ⁺ ,K ⁺ -Adenosine Triphosphatase. DONG-HEE KIM, TAI AKERA AND THEODORE M. BRODY	368
Histamine Antagonists as Antiarrhythmic Agents in Ouabain Cardiotoxicity in the Cat. JOHN C. SOMBERG, HELEN BOUNOUS, NORMAN CAGIN AND BARRIE LEVITT	375
Controlled Delivery of an Antitumor Drug: Localized Action of Liposome Encapsulated Cytosine Arabinoside Administered <i>via</i> the Respiratory System. R. L. JULIANO AND H. N. McCULLOUGH	381
Effects of Different Stages of Aortic Coarctation Hypertension on Aortic Contraction and Relaxation in Rats. FONG M. LAI, TARAK TANIKELLA, LUCIEN THIBAUT, PETER S. CHAN AND PETER CERVONI	388
Opioid Binding Properties of Brain and Peripheral Tissues: Evidence for Heterogeneity in Opioid Ligand Binding Sites. FRANCES M. LESLIE, CHARLES CHAVKIN AND BRIAN M. COX	395
Pressor Effects of Electrical Stimulation of the Dorsal and Median Raphe Nuclei Anesthetized Rats. DONALD M. KUHN, WILLIAM A. WOLF AND WALTER LOVENBERG	403

Evidence that There are Subcellular Pools of Norepinephrine and that There is Flux of Norepinephrine between These Pools. LANCE L. SIMPSON	410
Interaction of Adrenaline and Acetylcholine on Cardiac Pacemaker Function. Functional Inhomogeneity of the Rabbit Sinus Node. ALBERT J. C. MACKAAY, TOBIAS OP'T HOF, WIM K. BLEEKER, HABO J. JONGSMA AND LENNART N. BOUMAN	417
Spontaneous Contractions and Membrane Activity of Castrated Guinea-Pig Vas Deferens. REGINA P. MARKUS, A. J. LAPA AND J. R. VALLE	423
Effects of Dopamine, Apomorphine, γ -Hydroxybutyric Acid, Haloperidol and Pimozide on Reflex Bradycardia in Rats. F. F. CHEN AND M. T. LIN	427
Clonidine-Induced Hyperglycemia: Evidence Against a Growth Hormone-Mediated Effect. CRISTIANO BARBIERI, CARLO FERRARI, ROBERTO CALDARA, GIANPAOLO TESTORI, GABRIO A. DAL BO AND ANNA BERTAZZONI	433
Noradrenergic Influences on Sound-Induced Seizures. ROGER HORTON, GILL ANLEZARK AND BRIAN MELDRUM	437
The Potent Excitatory Effect of a Novel Polypeptide, Anthopleurin-B, Isolated from a Sea Anemone (<i>Anthopleura xanthogrammica</i>) on the Frog Spinal Cord. YOSHIHISA KUDO AND SHOJI SHIBATA	443
Plasma and Myocardial Tissue Concentrations of UM-272 (N,N-Dimethylpropranolol) after Oral Administration in Dogs. EUGENE PATTERSON, PHILIP STETSON AND BENEDICT R. LUCCHESI	449

No. 3, September 1980

Naloxazone, a Long-Acting Opiate Antagonist: Effects on Analgesia in Intact Animals and on Opiate Receptor Binding <i>in Vitro</i> . GAVRIL W. PASTERNAK, STEVEN R. CHILDERS AND SOLOMON H. SNYDER	455
Differential Effects of Divalent Cations, Cation Chelators and an Ionophore (A23187) on Morphine and Dibutyl Guanidine 3':5'-Cyclic Monophosphate Antinociception. FRANK J. VOCCI, JR., SANDRA P. WELCH AND WILLIAM L. DEWEY	463
Albuterol-Induced Erythropoietin Production and Prostaglandins Release in the Isolated Perfused Dog Kidney. HEINZ W. RADTKE, WILLIAM JUBIZ, JEAN B. SMITH AND JAMES W. FISHER	467
Distensibility and Responsiveness of the Rat Seminal Vesicle: Effects of Denervation and Pretreatment of Animals with 6-Hydroxydopamine and Reserpine. JEFFREY S. FEDAN AND JOHN C. BESSE	472
Prediction of Pulmonary Benzo(a)pyrene 4,5-Oxide Clearance: A Pharmacokinetic Analysis of Epoxide-Metabolizing Enzymes in Rabbit Lung. BRIAN R. SMITH AND JOHN R. BEND	478
Use of Impromidine to Define Specific Histamine H-2 Effects on Gastric Secretion, Heart Rate and Blood Pressure in Conscious Dogs. E. MOLINA, J. RENTZ AND B. I. HIRSCHOWITZ	483
Pressor Response to 5-Hydroxytryptamine, Norepinephrine and KCl in the Perfused Hindquarter Preparation from the Spontaneously Hypertensive Rat. JOHN B. CHENG AND SHOJI SHIBATA	488
Binding of Adenosine to the Crude Plasma Membrane Fraction Isolated from Dog Coronary and Carotid Arteries. PURABI DUTTA AND S. JAMAL MUSTAFA	496
Heroin and Naltrexone Effects on Pituitary-Gonadal Hormones in Man: Interaction of Steroid Feedback Effects, Tolerance and Supersensitivity. JACK H. MENDELSON, JAMES ELLINGBOE, JOHN C. KUEHNLE AND NANCY K. MELLO	503
Use of an Uncoupling Agent to Distinguish between Direct Stimulation of Metabolism and Direct Stimulation of Transport: Investigation of Antidiuretic Hormone and Aldosterone. DOREEN A. SPIRES AND MICHAEL W. WEINER	507
Specific, High Affinity [³ H]Ethylketocyclazocine Binding in Rat Central Nervous System: Lack of Evidence for κ Receptors. JACOB M. HILLER AND ERIC J. SIMON	516
The Effect of Ethanol on the Fate of Mercury Vapor Inhaled by Man. J. B. HURSH, M. R. CREENWOOD, T. W. CLARKSON, J. ALLEN AND S. DEMUTH	520
Peripheral Vasodilator Effects of Prostaglandins: Comparison of 6-Keto-Prostaglandin E ₁ with Prostacyclin and Escape from Prostaglandin E ₂ in the Mesenteric Vascular Bed. L. P. FEIGEN, B. M. CHAPNICK, A. L. HYMAN, L. KING, B. MARASCALCO AND P. J. KADOWITZ	528
Receptor Interactions of Imidazolines. VI. Significance of Carbon Bridge Separating Phenyl and Imidazoline Rings of Tolazoline-Like α Adrenergic Imidazolines. ROBERT R. RUFFOLO, JR., EMILY L. YADEN, JAMES E. WADDELL AND ROBERT D. DILLARD	535
Biphasic Effect of Extracellular [K] on Isoproterenol-Stimulated Renin Secretion from Rat Kidney Slices. PAUL C. CHURCHILL AND MONIQUE C. CHURCHILL	541
Studies of the Influence of Portacaval Shunt on the Metabolism of Tyrosine. FAROUK M. ALI, JOSEPH ANSLEY AND BAHJAT A. FARAJ	546
Acute Regulation of β Adrenergic Catecholamine Sensitivity in Human Lymphocytes. J. FREDERICK KRALL, MARIANNE CONNELLY AND MICHAEL L. TUCK	554
On the Mechanism of Action of Adrenocortical Steroids: Cortisol and Aldosterone Enhance Guanylate Cyclase Activity. DAVID L. VESELY	561
Subcellular Actions and Potential Adverse Cardiac Effects of the Cardiotonic Ionophore Monensin. MARSHAL SHLAFFER AND PAULA KANE	567
Evidence for Two Distinct Types of Potassium-Activated Calcium Channels in an Intestinal Smooth Muscle. LEON HURWITZ, LINDA J. MCGUFFEE, SALLY A. LITTLE AND HENRY BLUMBERG	574
Effects of Variations in Extracellular Acetylcholine and Calcium Ion Concentration on the Operational Level of Calcium Channels in Intestinal Smooth Muscle. LEON HURWITZ AND JUDI WEISSINGER	581
Relationship between Pentylentetrazol-Induced Seizures and Brain Pentylentetrazol Levels in Mice. WAYNE D. YONEKAWA, HARVEY J. KUPFERBERG AND DIXON M. WOODBURY	589

Relationship of Guanabenz Concentrations in Brain and Plasma to Antihypertensive Effect in the Spontaneously Hypertensive Rat. ROGER H. MEACHAM, HANS W. RUELIIUS, CONSTANCE J. KICK, JOHN R. PETERS, SUSAN M. KOCMUND, SAMUEL F. SISENWINE AND ROBERT L. WENDT	594
Pharmacokinetics and Metabolism of <i>l</i> - α -[O, ³ H ₂]-Acetyl Normethadol (nor-LAAM), the Active Metabolite of LAAM, in Acutely and Chronically Treated Rhesus Monkeys. A. L. Misra, J. G. Bartolomeo, R. Bloch, S. J. Mulé and T. R. Bates	599
Clonidine-Induced Diuresis in the Rat: Evidence for a Renal Site of Action. MYRON MILLER	608
Phencyclidine-Like Discriminative Effects of Opioids in the Rat. STEPHEN G. HOLTZMAN	614
Methylmercury-Induced Changes in Operant Discrimination by the Pigeon. VICTOR G. LATIES AND HUGH L. EVANS	620
The Cardiac Pharmacology of Tiotidine (ICI 125,211): A New Histamine H ₂ -Receptor Antagonist. JEROME P. TRZECIAKOWSKI AND ROBERTO LEVI	629
The Effects of Tricyclic Antidepressants on Performance under a Differential-Reinforcement-of-Low-Rates Schedule in Rats. PATRICIA S. MCGUIRE AND LEWIS S. SEIDEN	635
Alterations in the Biochemical Properties of Central Dopamine Synapses following Chronic Postnatal PbCO ₃ Exposure. LEON C. WINCE, CAROL A. DONOVAN AND ALBERT J. AZZARO	642
The Effect of Dopamine Uptake Blocking Agents on the Amphetamine-Induced Circling Behavior in Mice with Unilateral Nigro-Striatal Lesions. YIU K. FUNG AND NORMAN J. URETSKY	651
Differences between the Actions of Thiopental and Pentobarbital in Squid Giant Axons. CARLOS SEVCIK	657
Sustained Cardiac <i>Beta</i> Adrenoceptor Blockade <i>in Vitro</i> and Increased Vulnerability to Aconitine-Induced Arrhythmias <i>in Vivo</i> after Propranolol Withdrawal in Rats. ANDERS HEDBERG, OLLE ISAKSSON AND BO LUNDGREN	664
The Mode of Action of Local Anesthetics on the Calcium Pump of Brain. E. E. TROTTA, G. L. FREIRE AND C. S. GODINHO	670
Age-Related Alterations in the Response of Rabbit Tracheal Smooth Muscle to Agents. SHIGEHIRO HAYASHI AND NOBORU TODA	675
Kinetics of Distribution of <i>dl</i> -Propranolol in Various Organs and Discrete Brain Areas of the Rat. G. BIANCHETTI, J. L. ELGHOZI, R. GOMENI, P. MEYER AND P. L. MORSELLI	682
Effects of Adrenochrome on Calcium Accumulating and Adenosine Triphosphatase Activities of the Rat Heart Microsomes. STOSHI TAKEO, GINA M. L. TAAM, ROBERT E. BEAMISH AND NARANJAN S. DHALLA	688
Effects of Sustained Seizures Produced by Intrahippocampal Injection of Kainic Acid on Noradrenergic Neurons: Evidence for Local Control of Norepinephrine Release. MARK F. NELSON, ROBERT ZACZEK AND JOSEPH T. COYLE	694
Metabolic Activation and Detoxification of Bromobenzene Leading to Cytotoxicity. SERRINE S. LAU, GERALD D. ABRAMS AND VINCENT G. ZANNONI	703
Inhibitory Effects of Gentamicin on Renal Mitochondrial Oxidative Phosphorylation. CHARLES F. SIMMONS, JR., RONALD T. BOGUSKY AND H. DAVID HUMES	709
Comparison of the Biotransformation and Hepatotoxicity of Halothane and Deuterated Halothane. I. GLENN SIPES, A. JAY GANDOLFI, LANCE R. POHL, GOPAL KRISHNA AND BURNELL R. BROWN, JR.	716
Bioactivation and Covalent Binding of Halothane <i>in Vitro</i> : Studies with [³ H]- and [¹⁴ C]Halothane. A. JAY GANDOLFI, RUSSELL D. WHITE, I. GLENN SIPES AND LANCE R. POHL	721
Histamine as a Punisher in Squirrel Monkeys: Effects of Pentobarbital, Chlordiazepoxide and H ₁ - and H ₂ -Receptor Antagonists on Behavior and Cardiovascular Responses. STEVEN R. GOLDBERG	726
Index, Volume 214, July-September, 1980	737