CONTENTS OF VOLUME 215

No. 1, October 1980

Hydrolysis of Diacetylmorphine (Heroin) by Human Serum Cholinesterase. Oksana Lockridge, Nancy Mortersaw-Jackson, Harry W. Eckberg and Bert N. La Du ... 1

Effects of Drugs on Behavior in Rats Maintained on Morphine, Methadone or Pentobarbital. D. E. McMillan, W. T. McGivney and W. C. Hardwick ... 9

The Effect of Arginine Vasopressin and Its Analog on the Synthesis of Prostaglandin E2 by Rat Renal Medullary Interstitial Cells in Culture. Thomas R. Beck, Avy Harish and Michael J. Dunn ... 15

The Effects of Cocaine and Metanephrine on the Cardiac Responses to Norepinephrine Infusions. Yukitaka Masuda, Yasuo Matsuda and Matthew N. Levy ... 20

Effects of Lanthanum and Trifluoperazine on [125I]Caldominulin Binding to Rat Striatal Particulates. Yuen-Sum Lau and Margaret E. Gney ... 28

Tolerance and Disposition of Tetrahydrocannabinol in Man. C. Anthony Hunt and Reese T. Jones ... 35

The Effects of Methadone on Respiration and Ventilation in Pygmy Goats. Richard C. Neal and George D. Olsen ... 45

Presynaptic and Postsynaptic Neuromodulatory Effects of a Specific Inhibitor of Acetylcholinesterase. Richard T. Bois, Rick G. Hummel, Wolf D. Dettbarn and Michael B. Laskowski ... 53

Opiate Binding Sites in the Retina: Properties and Distribution. R. D. Howells, J. Groth, J. M. Hiller and E. J. Simon ... 60

The Role of Norepinephrine in the Regulation of Fluid Absorption in the Rat Proximal Tubule. Y. L. Chan ... 65

The Effect of Estradiol-17β Treatment on the Metabolism and Biliary Excretion of Phenytoin in the Isolated Perfused Rat Liver and in Vivo. Mary Vore and Christopher Montgomery ... 71

Pharmacokinetic-Dynamic Analysis of the Indomethacin-Pseudoephedrine Interaction in Man. P. Chennavasin, R. Seiwel and D. C. Brater ... 77

Live Protein Synthesis and Catabolism in Mirex-Pretreated Rats with Enlarging Livers. Keith M. Robinson and James D. Yarbrough ... 82

Oxazepam Kinetics: Effects of Age and Sex. David J. Greenblatt, Marcia Divoll, Jerold S. Harmatz and Richard I. Shader ... 86

Differential Effects of the Anticonvulsants, Phenobarbital, Ethosuximide and Carbamazepine on Neuromuscular Transmission. Marc T. Alderich and Brad A. Trommer ... 92

The in Vitro Formation of Glutathione Conjugates with the Microsomal Activated Pulmonary Bronchial Alkylating Agent and Cytoxin. Alan R. Buckfitt and Michael R. Boyd ... 97

Mechanism of Captopril-Induced Renal Vasodilatation in Anesthetized Dogs after Nonhypotensive Hemorrhage. P. C. Wong and B. G. Zimmerman ... 104

Transit Patterns of Marker Compounds Given by Segmented Retrograde Intrabiliary Injection (SRII) in the Isolated in Situ Perfused Rat Liver. Toshiko Imamura and James M. Fujimoto ... 110

Site of Action of Dehydrocholate in Inhibiting the Biliary Excretion of Morphine in the Isolated in Situ Perfused Rat Liver. Toshiko Imamura and James M. Fujimoto ... 116

A New Mode of Action of SKF 522-A on Morphine Disposition Studied by Segmented Retrograde Intrabiliary Injection (SRII) in the Isolated in Situ Perfused Rat Liver. Toshiko Imamura and James M. Fujimoto ... 122

Behavioral and Biochemical Effects of the Antidepressant Bupropion (Wellbutrin): Evidence for Selective Blockade of Dopamine Uptake in Vivo. Barrett R. Cooper, Teresa J. Hester and Robert A. Maxwell ... 127

Amphetamine-Haloperidol Interactions on Striatal and Mesolimbic Tyrosine Hydroxylase Activity and Dopamine Metabolism. Ronald Kuczynski ... 135

Potentiation of Responses to Adrenergic Nerve Stimulation in Isolated Rat Atria during Chronic Tricyclic Antidepressant Administration. Fulton T. Crews and Charles B. Smith ... 143

Pimozide: Delayed Onset of Action at Rat Striatal Pre- and Postsynaptic Dopamine Receptors. Brian A. McMillen, Dwight C. German, Manjit K. Sanghera, Worthy Warna and Parkhurst A. Shore ... 150

The Pulmonary Vascular Effects of Three Prostaglandin I2 Analogs in Conscious Newborn Lambs. James E. Lock, Flavio Cocchini, Francis Hamilton, Alison Greenaway-Coates and Peter M. O'Leary ... 156

Ibuprofen Improves Survival from Endotoxin Shock in the Rat. W. C. Wise, J. A. Cook, T. Eller and P. V. Halushka ... 160

Effect of Plasma Protein Binding on Quinidine Kinetics in the Rabbit. Theodore W. Guntert and Svein Oie ... 165

Effect of the Converting Enzyme Inhibitor SQ-20881 on Urinary Excretion of Prostaglandin E2 in the Rat: Influence of Pretreatment with Deoxycorticosterone. J. G. Barr, D. Diz, M. L. Kauker and A. Nasiell ... 172


Cephaparsin Nephrotoxicity. Transport, Cytotoxicity and Mitochondrial Toxicity of Cephaparsin. Bruce M. Tune and Doris Fravert ... 186


Changes in Cardiac Glycoside Activity Produced by Aminosugar Addition. L. Scott Cook, Robert W. Caldwell and Clinton B. Nash ... 198

Stereospecific Radioimmunoassay of a-1-Acetylthiomethanol (LAAM). Kip L. McGilland and George D. Olsen ... 205

Regulation of Calcium Fluxes in Rat Pancreatic Islets: The Role of K+ Conductance. A. Herchuelz, N. Thornart, A.
Studies on the Effect of Chronic Oral Administration of Minoxidil and Hydralazine on Vascular Function in Spontaneously Hypertensive Rats. Stanley Greenberg

Prednisolone Clearance at Steady State in Dogs. Felix J. Frey, Brigitte M. Frey, Andreas Grether and Leslie Z. Benet

Disposition of Enflurane in Obese Patients. Matthew S. Miller, A. Jay Gandolfi, Robert W. Vaughan and John B. Bentley

The Cyclic Nucleotide of the Rat Superior Cervical Ganglion. Linda F. Quenzer, Brian A. Patterson and Robert L. Volle

Phenytoin, Renal Function and Renin Release. Stephen D. Mical, Gary L. Slick, Daoud Abu-Hamdan and Franklin D. McDonald

Modulatory Effect of Brain Acetylcholine on Reflex-Induced Bradycardia and Tachycardia in Conscious Rats. A. P. Caputi, F. Rossi, K. Carney and H. E. Brezenoff

Effects of Castration and Chronic Morphine Administration on Liver Alcohol Dehydrogenase and the Metabolism of Ethanol in the Male Sprague-Dawley Rat. Theodore J. Cicero, Jerrold D. Bernard and Karin Newman


Effects of Transmembrane Potential on Oscillatory Afterpotentials Induced by Acetylcholine in Canine Ventricular Tissues. Gregory R. Ferrier

Maturation of Sympathetic Neurotransmission in the Rat Heart. VI. The Effect of Neonatal Central Catecholaminergic Lesions. Randy Deskin, Elliott Mills, William L. Whitmore, Frederic J. Seidler and Theodore A. Slotkin

Muscarnic Antagonism of the Effects of a Phosphodiesterase Inhibitor (Methylisobutylxanthine) in Embryonic Chick Ventricles. Rebecca L. Biegon, Paul M. Epstein and Achilles J. Pappano

Possible Generation of Potential Vasoconstricting Substance from Prostaglandin Endoperoxide Analogs, Human Platelets Mixture. Shoji Shibata, W. K. W. Ho and U. Ishida

Dissociation of Varied Actions of Norepinephrine on 40Ca Uptake and Release at Different Sites in Rabbit Aortic Smooth Muscle. Hideaki Karaki and George E. Weiss

Stereoselectivity of the Stimulus Effects of Morphine and Cyclazocine in the Squirrel Monkey. Janice J. Teal and Stephen G. Holtzman

Potentitative Effects of Alpha Agonist Sympathomimetetic Amines on Vasocostriction by Adrenergic Nerve Stimulation. Che Su

Comparative Study of the Electroencephalographic and Behavioral Effects of I-α-Acetylmethadol (LAAM), Two of Its Metabolites and Morphine and Methadone in the Rat. Scott E. Lukas, J. Edward Moreton and Naïm Khazan

Gentamicin Uptake by Renal Tubule Brush Border Membrane Vesicles. James J. Lipsky, Linda Cheng, Bertram Sacktor and Paul S. Liemtan

Differing Electrophysiologic Effects of Slow Response Inhibiting Agents Manganese and Verapamil on Ischemic, Infarcted and Normal Tissue in Situ. Joel Kuperstein and Robert Cohen

Metabolism of Benzidine by a Prostaglandin-Mediated Process in Renal Inner Medullary Slices. Neville S. Rapp, Terry V. Zenser, Wendy W. Brown and Bernard B. Davis

Effect of the Angiotensin Converting Enzyme Inhibitor, Captopril, on NaCl Appetite of Rats. Melvin J. Freely

Increase of Neurotensin Content Elicited by Neuroleptics in Nucleus Accumbens. S. Govoni, J. S. Hong, H.-Y. T. Yang and E. Costa

Inhibition of Depressor Cardiovascular Reflexes by a Derivative of γ-Aminobutyric Acid (GABA) and by General Anesthetics
with Suspected GABA-Mimetic Effects. Peter M. Lalley
Response and Sensitivity of Female Guinea-Pig Respiratory Tissues to Agonists during Ontogenesis. Charles Brine, Pamela G. Duncan, Malinda Midzenski and James S. Douglas
Cyclic Nucleotides and Contraction/Relaxation in Airway Muscle: H1 and H2 Agonists and Antagonists. Pamela G. Duncan, Charles Brine, Richard L. Adolphson and James S. Douglas
Mechanism of Renal Tubular Secretion of Norepinephrine in the Rabbit. Rodney W. Lappe, David P. Henry and Lynn R. Willis
A Comparative Study of the Pharmacological Properties of the Positive Potential Recorded from the Superior Cervical Ganglia of Several Species. N. J. Dun and A. G. Karczew
The Presence of the Type A Form of Monoamine Oxidase within Nigrostriatal Dopamine-Containing Neurons. Keith T. Demarest, David J. Smith and Albert J. Azzaro
Hydrocortisone and Human Lymphocytes: Increases in Cyclic Adenosine 3'5'-Monophosphate and Potentiation of Adenylate Cyclase-Activating Agents. Gianni Marone, Lawrence M. Lichtenstein and Marshall Plaut
The Ionic Mechanism of Prolongation of Action Potential Duration of Cardiac Ventricular Muscle by Anthopleurin-A and Its Relationship to the Inotropic Effect. Keitaro Hashimoto, Reikou Ochi, Koboku Hashimoto, Jun Imui and Yuji Miura
Presynaptic Effects of 2-Aminotetrinalin on Striaal Dopaminergic Neurons. Irene S. Hoffman, Robert J. Naylor and Luigi X. Cubeddu
Antidopaminergic Properties of Yohimbine. Bernard Scatton, Branimir Zivkovic and Jaroslav Dedek
Effects of Acetubolol and Other Structurally Related Beta Adrenergic Blockers on Transmembrane Action Potential in Guinea-Pig Papillary Muscles. Hideaki Sada and Takashi Ban
Effects of Alpha Adrenergic Blockade, Combined Nicotinic and Muscarinic Ganglion Blockade and Spinal Anesthesia upon Norepinephrine Depression of Ganglion Transmission in the Dog. James G. Hilon
Does Histamine Influence Vasodilation Caused by Prolonged Arterial Occlusion or Heavy Exercise? Alan Daniel and Carl R. Honig

No. 3, December 1980

The Effects of Chronic Methylphenidate Treatment on Growth and Endocrine Function in the Developing Rat. George H. Geelley, Jr. and J. S. Kizer
Histaminergic Mechanisms Involved in the Centrally Mediated Effects of Ouabain. Randall L. Tackett and J. E. Holl
Different Mechanisms of Action of Acetazolamide and Parathyroid Hormone on Proximal Tubular Absorption of Fluid and 5,5-Dimethyl-2,4-Oxazolidinedione. Y. L. Chan
Transport of Choline Out of the Cranial Cerebrospinal Fluid Spaces of the Rabbit. Robert C. Lanman and Lewis S. Schanker
Sodium Dependence of the Positive Inotropic Effect of Cardiac Glycosides. Jay R. Wiggins and Juan Jose Bentolila
Phenyltoin Inhibition of Cyclic Guanosine 3'5'-Monophosphate (cGMP) Accumulation in Neuroblastoma Cells by Calcium Channel Blockade. Robert E. Study
Regulation of Serotonin (5-HT) Receptors Labeled with [3H]Spiroperidol by Chronic Treatment with the Antidepressant Amitriptyline. Stephen J. Peroutka and Solomon H. Snyder
Three Day Pleural Inflammation: A New Model to Detect Drug Effects on Macrophage Accumulation. N. Ackerman, A. Tomoln, L. Miram, J. Kiephets, S. Martinez and A. Carter
Maturation of Sympathetic Neurotransmission in the Rat Heart. V. Development of Baroreceptor Control of Sympathetic Tone. Jorge Bartolome, Elliott Mills, Christopher Lauer and Theodore A. Slotkin
Induction of Aryl Hydrocarbon Hydroxylase Activity in the Rat Prostate Glands by 2,3,7,8-Tetrachlorodibenzo-p-Dioxin. I. P. Lee and K. Suzuki
Electrophysiological Evidence for Presynaptic Actions of Phencyclidine on Noradrenergic Transmission in Rat Cerebellum. Jawanl Marwah, Michael R. Palmer, Donald J. Woodward, Barry J. Hopper and Robert Freedman
Estrogen-Induced Alterations in the Autonomic Responses of the Rabbit Urinary Bladder. Robert M. Levin, Frances S. Shoffer and Alan J. Wein
Alterations in Pentobarbital and Meperidine Pharmacokinetics Induced by Bile Duct Ligation in the Rat. Robert G. Knodell, David A. Brooks, Richard C. Allen and Walter T. Kyner
Sites of Antinociceptive Action of Systemically Injected Morphine: Involvement of Supraspinal Loci as Revealed by Intracere-
broventricular Injection of Naloxone. JOSEPH C. YEUNG AND THOMAS A. RUDY

Multiplicative Interaction between Narcotic Agonisms Expressed at Spinal and Supraspinal Sites of Antinociceptive Action as Revealed by Concurrent Intrathecal and Intracerebroventricular Injections of Morphine. JOSEPH C. YEUNG AND THOMAS A. RUDY

Stereospecific Assay for (-)- and (+)-Propranolol in Human and Dog Plasma. BERNIE SILBER AND SIDNEY RIEGELMAN


Consistent Unmasking of Dopamine-Induced Dilation of the Canine Femoral Vascular Bed. JAY J. LISTINSKY, JAI D. KOHLI AND LEON I. GOLDBERG

Comparative Studies of the Pharmacological Effects of the d- and l-Isomers of Codeine. THUY T. CHAU AND LOUIS S. HARRIS

Effect of Carbonic Anhydrase Inhibitors and Acidosis on Choroid Plexus Epithelial Cell Sodium and Potassium. QUENTIN R. SMITH AND CONRAD E. JOHANSON

The Renal Clearance of Digoxin is Dependent upon the Serum Digoxin Concentration. THOMAS P. GIBSON AND ANTONIO P. QUINTANILLA

Purine Release from Vascular Adrenergic Nerves by High Potassium and a Calcium Ionophore, A-23187. TAKESHI KATSURAGI AND CHE SU


Actions of Mu, Kappa, Sigma, Delta and Agonist/Antagonist Opiates on Striatal Dopaminergic Function. PAUL L. WOOD, M. STOTLAND, J. W. RICHARD AND A. RACKHAM

The Effect of Theophylline and Other Methylxanthines on Presynaptic Inhibition of the Longitudinal Smooth Muscle of the Guinea-Pig Ileum Induced by Purine Nucleotides. F. K. OKWUASABA AND M. A. COOK

Neuronal Uptake of Choline Following Release of Acetylcholine in the Perfused Heart. RUTH LINNMAA, KONRAD LÖFELHOLZ, WOLFGANG WEIDE AND JUTTA WITZKE

Specific Changes in the Cholinergic System in Guinea-Pig Vas Deferens after Denervation. FUMIAKI HATA, KUNIO TAKEYASU, YOSHI MORIKAWA, RON-TSAN LAI, HAJIME ISHIDA AND HIROSHI YOSHIDA

Index, Volume 215, October–December, 1980