CONTENTS OF VOLUME 215

No. 1, October 1980

Hydrolysis of Diacetylmorphine (Heroin) by Human Serum Cholinesterase. OKASAN LOCKRIDGE, NANCY MITTERSHAW-JACKSON, HARRY W. ECKERSON 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 Effects of Cocaine and Metanephine on the Cardiac Responses to Norepinephrine Infusions. YUKITAKA MASUDA, YASUO MATSUDA AND MATTHEW N. LEVY 20

Effects of Lanthanum and Trifluoperazine on [125]Calmodulin Binding to Rat Striatal Particulates. YUEN-SUM LAU AND MARGARET E. NEGLEY 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. GLEN 45

Presynaptic and Postsynaptic Neuromuscular Effects of a Specific Inhibitor of Acetylcholinesterase. RICHARD T. BOIS, RICK G. HUMMEL, WOLF D. DETTBARN AND MICHAEL B. LASKOWSKI 53


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 Phenytion in the Isolated Perfused Rat Liver and in Vivo. MARY VORE AND CHRISTOPHER MONTGOMERY 71

Pharmacokinetic-Dynamic Analysis of the Indomethacin-Pufoside Interaction in Man. P. CHENNANASIV, R. SEITWELL 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 DOLLIV, JEROLD S. HARMATZ AND RICHARD I. SHADER 86

Differential Effects of the Anticonvulsants, Phenobarbital, Ethosuximide and Carbamazepine on Neuromuscular Transmission. MARC T. ALDERIDGE AND BRAD A. TROMMER 92

The In Vitro Formation of Glutathione Conjugates with the Microsomal Activated Pulmonary Bronchiolar Alkylating Agent and Cyanotoxin, 4-Ipomoeanol. 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. C. 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. BARRERET R. COOPER, TEREZA J. HESTER AND ROBERT A. MAXWELL 127

Amphetamine-Haloperidol Interactions on Striatal and Mesolimbic Tyrosine Hydroxylase Activity and Dopamine Metabolism. RONALD KUCZENSKI 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 Dopaminergic Receptors. BRIAN A. MCMILLAN, DWIGHT C. GERMAN, MANJIT K. SANGHERA, WORTHY WARMACK AND PARKHURST A. SHORE 150

The Pulmonary Vascular Effects of Three Prostaglandin E2 Analogs in Conscious Newborn Lambs. JAMES E. LOCK, FLAVIO COCEANU, FRANCIS HAMILTON, ALISON GREENWAY-COATES AND PETER M. OLELY 156

Ibuprofen Improves Survival from Endotoxic Shock in the Rat. W. C. WISE, J. A. COOK, T. ELLER AND P. V. HALUSKA 160

Effect of Plasma Protein Binding on Quinidine Kinetics in the Rabbit. THEODOR W. GUNERT AND SVEIN ØIE 165


Cephalosporin Nephrotoxicity. Transport, Cytotoxicity and Mitochondrial Toxicity of Cephaloglycin. BRUCE M. TUNE AND DORIS FRAVART 186


Changes in Cardiac Glycoside Activity Produced by Aminosugar Addition. L. SCOTT COOK, ROBERT W. CALDWELL AND CLINTON B. NASH 198

Stereospecific Radioimmunoassay of 3-L-Acetylthiocholinid (LAAM). KIP L. MCGILLARD AND GEORGE D. OLSEN 205

Regulation of Calcium Fluxes in Rat Pancreatic Islets: The Role of K+ Conductance. A. HERCHEUL, N. THONNART, A. III
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 MIDGEZNI 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. LAPPF, DAVID P. HENRY and LYNN R.
WILLIS
Regulatory Role of Glutathione and Soluble Sulphydryl Groups in the Toxicity of Adriamycin. RICHARD D. OLSON, JAMES S.
MACDONALD, CHRIS J. VAN BOXTJL, ROBERT C. BOERTH, RAYMOND D. HARRISON, ALFRED E. SLONIIM, RICHARD W.
FREEMAN and JOHN A. OATES
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. KARCMAR
The Presence of the Type A Form of Monoamine Oxidase within Nigrostriatal Dopamine-Containing Neurons. KEITH T.
DEMAREST, DAVID J. SMITH and JERALD P. 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 Isotonic Effect. KEITARO HASHIMOTO, REKU OCHI, KOBOKU HASHIMOTO, JUN INUI and YUUI MIURA
Presynaptic Effects of 2-Aminoteralins on Striatal Dopaminergic Neurons. IRENE S. HOFFMAN, ROBERT J. NAYLOR and LUIGI
X. CUBERDU
Antidopaminergic Properties of Yohimbine. BERNARD SCATTON, BRANIMIR ZIVKOVIC and JAROELAV DEDER
AWAD
Effects of Acebutolol and Other Structurally Related Beta Adrenergic Blockers on Transmembrane Action Potential in Guinea-
Pig Papillary Muscles. HIDEAKI SADA and TAKAKI BAN
Tolerance to the Effects of Morphine on Intestinal Motility of Unanesthetized Dogs. NORMAN W. WEISBRODT, PIOTR J. THOR,
E. M. COPELAND and THOMAS F. BURKS
Effects of Alpha Adrenergic Blockade, Combined Nicotinic and Muscarinic Ganglion Blockade and Spinal Anesthesia upon
Norepinephrine Depression of Perfusion in the Dog. JAMES H. HILTON
Improvement of Human Myocardial Mitochondria after Dobutamine: A Quantitative Ultrastructural Study. DONALD V. UNVER-
FERTH, CARL V. LIEBER, RAYMOND D. MAGORIEN, RICHARD CROSBERRY, JOHN R. SIVIRBEL, ALBERT J. KOLIBASH, MICHAEL
R. DICK, JOSEPH A. MEACHAM and NOBUHIKA BABA
Does Histamine Influence Vasodilation Caused by Prolonged Arterial Occlusion or Heavy Exercise? ALAN DANIEL and CARL R.
HONG
Propranolol Effects on Membrane Repolarization Time in Isolated Canine Purkinje Fibers: Threshold Tissue Content and the
Influence of Exposure Time. JACK K. PHEUETT, THOMAS WALLS and U. KRISTINA WALLS

No. 3, December 1980

The Effects of Chronic Methylphenidate Treatment on Growth and Endocrine Function in the Developing Rat. GEORGE H.
GHEELEY, 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 JOSÉ BENTOLLIA
Phenytoin Inhibition of Cyclic Guanosine 3':5'-Monophosphate (cGMP) Accumulation in Neuroblastoma Cells by Calcium
Channel Blockade. ROBERT E. STUDY
Regulation of Serotonin 5-HT2 Receptors Labeled with [3H]Spiroperidol by Chronic Treatment with the Antidepressant
Amitriptyline. STEPHEN J. PEROVSTK and SOLOMON H. SNYDER
Three Day Pleural Inflammation: A New Model to Detect Drug Effects on Macrophage Accumulation. N. ACKERMAN, A.
TOMOLONIS, L. MIRAM, J. KHEIFETS, S. MARTINEZ and A. CARVER
Maturation of Sympathetic Neurotransmission in the Rat Heart. V. Development of Baroreceptor Control of Sympathetic Tone.
JOGIE BARTOLOME, ELLIOTT MILLS, CHRISTOPHER LAU 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 Phenylcyclidine on Noradrenergic Transmission in Rat Cerebellum.
JWAHRALI MARWAHA, MICHAEL R. PALMER, DONALD J. WOODWARD, BARRY J. HOFER and ROBERT FREEDMAN
Estrogen-Induced Alterations in the Autonomic Responses of the Rabbit Uterine Bladder. ROBERT M. LEVIN, FRANCES S.
SHOFER and ALAN J. WEIN
Alterations in Pentobarbital and Meperidin Pharonacokinetics Induced by Bile Duct Ligature in the Rat. ROBERT G. KNOWELL,
DAVID A. BROOKS, RICHARD C. ALLEN and WALTER T. KYNDE
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 626
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 633
Stereospecific Assay for (−)- and (+)-Propranolol in Human and Dog Plasma. BERNIE SILBER AND SIDNEY RIEGELMAN 643
Consistent Unmasking of Dopamine-Induced Dilation of the Canine Femoral Vascular Bed. JAY J. LISTINSKY, JAI D. KOHLI AND LEON I. GOLDBERG 662
Comparative Studies of the Pharmacological Effects of the d- and l-Isomers of Codeine. THUY T. CHAU AND LOUIS S. HARRIS 668
Effect of Carbonic Anhydrase Inhibitors and Acidosis on Choroid Plexus Epithelial Cell Sodium and Potassium. QUENTIN R. SMITH AND CONRAD E. JOHANSON 673
The Renal Clearance of Digoxin is Dependent upon the Serum Digoxin Concentration. THOMAS P. GIBSON AND ANTONIO P. QUINTANILLA 681
Purine Release from Vascular Adrenergic Nerves by High Potassium and a Calcium Ionomophore, A-23187. TAKEHI KATSURAGI AND CHE SU 685
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 697
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. OKEWUASSABA AND M. A. COOK 704
Neuronal Uptake of Choline Following Release of Acetylcholine in the Perfused Heart. RUTH LINDMAR, KONRAD LÖFFELHOLZ, WOLFGANG WEIDE AND JUTTA WITZKE 710
Specific Changes in the Cholinergic System in Guinea-Pig Vas Deferens after Denervation. FUMIKI HATA, KUNIO TAKAYABU, YOSHIKORI MORIKAWA, RON-THAN LAI, HIJME ISHIDA AND HIROSHI YOSHIDA 716
Index, Volume 215, October–December, 1960 723