CONTENTS OF VOLUME 178

No. 1, July 1971

Adenyl Cyclase in Human Leukocytes: Evidence for Activation by Separate Beta Adrenergic and Prostaglandin Receptors. Henry R. Bourne and Kenneth L. Mel-	
The Fate of Intracisternally Administered Norepinephrine-*H in the Brain and Spinal	1
Cord of the Rabbit. J. P. CHALMERS AND R. J. WURTMAN	8
STEPHEN E. SMITS AND A. E. TAKEMORIUltrastructural Cytochemistry and Pharmacology of 5-Hydroxytryptamine in Adrer nergic Nerve Endings. II. Accumulation of 5-Hydroxytryptamine in Nerve Vesicles	20
Containing Norepinephrine in Rat Vas Deferens. Luis María Zieher and Guillermo Jaim-Etcheverry	30
Ultrastructural Cytochemistry and Pharmacology of 5-Hydroxytryptamine in Adrenergic Nerve Endings. III. Selective Increase of Norepinephrine in the Rat Pineal Gland Consecutive to Depletion of Neuronal 5-Hydroxytryptamine. Guillermo	40
JAIM-ETCHEVERRY AND LUIS MARÍA ZIEHER Early Pre- and Postjunctional Effects of 6-Hydroxydopamine. G. HAEUSLER Studies on the Intestinal Relaxation Produced by Dopamine. RICHARD D. HEILMAN	42 49
AND BERT K. B. LUM Autonomic Receptor Mechanisms in Embryonic Chick Myocardial Cell Cultures.	
ROBERT J. ERTEL, DAVID E. CLARKE, JEAN C. CHAO AND FREDERICK R. FRANKE Electrophysiologic Effects of Lidocaine on Isolated Canine and Rabbit Atrial Tissue.	
WILLIAM J. MANDEL AND J. THOMAS BIGGER, JR	81
Tosylate. John E. Markis and Jan Koch-Weser	94
Vasodilatory Effects of Tetrodotoxin in the Cat. C. Y. Kao, J. Nagasawa, M. Y.	
SPIEGELSTEIN AND Y. N. CHA. Betahistine, Its Metabolites and Vascular Responses in the Forelimb of the Dog. HERIBERT KONZETT, ROBERT G. BOST, FAYE J. BOWMAN, EDWARD R. BOWMAN AND	110
HERBERT McKennis, Jr The Effect of Tolbutamide on Blood Pressure. John K. Wales, Alison M. Grant	
AND FREDERICK W. WOLFF Effects of Prolonged Administration of Vasopressin on Plasma Sodium and on Renal	
Excretion of Electrolytes and Water. W. Y. Chan Protective Effect of Ascorbic Acid, Isoascorbic Acid and Mannitol against Tetracycline- Induced Nephrotoxicity. Roman B. Polec, Samuel D. J. Yeh and Maurice E.	
Excretion and Distribution of Iophenoxic Acid. GILBERT H. MUDGE, GORDON J.	
STREWLER, JR., NORMAN DESBIENS, WILLIAM O. BERNDT AND DENIS N. WADE Metabolism of Iophenoxic Acid in the Dog. Denis N. WADE, NORMAN DESBIENS,	
GORDON J. STREWLER, JR., WILLIAM O. BERNDT AND GILBERT H. MUDGE On the Mechanisms of ¹⁴ C-Nicotine Distribution in Rat Submaxillary Gland in Vitro.	
JAMES W. PUTNEY, JR. AND JOSEPH F. BORZELLECA	
Comparison of Pyrazole and 4-Bromopyrazole as Inhibitors of Alcohol Dehydrogenases: Their Potency, Toxicity and Duration of Action in Mice. Dora B. Goldstein	192
AND NANDITA PAL	
Diazepam Competes for Thyroxine Binding Sites. George C. Schussler	204
Organelles of Various Species. U. Goetz, M. Da Prada and A. Pletscher	210

The Possible Relationship between Metabolism and Cardiac Toxicity of Daunomycin and Related Compounds. R. Mhatre, E. Herman, A. Huidobro and V. Warav-	010
Adjuvant-Induced Arthritis in Rats. II. Drug Effects on Physiologic, Biochemical and	216
Immunologic Parameters. D. T. Walz, M. J. DiMartino and A. Misher	223
The Effects of Morphine, Pentobarbitol and Chlorpromazine on Bioelectrical Potentials Evoked in the Brain Stem of the Cat by Electrical Stimulation of the Gingiva	
and Tooth Pulp. James Nakamura and C. L. Mitchell	232
Effects of l-\Danks-1 and l-\Danks-1 trans-Tetrahydrocannabinol and Cannabinol on Schedule-Con-	
trolled Behavior of Pigeons and Rats. J. M. Frankenheim, D. E. McMillan and L. S. Harris	041
No. 2, August 1971	241
Quantitative Determination of Morphine in Serum by Radioimmunoassay. Sydney	
SPECTOR	253
The Effect of Ouabain on the Washout and Uptake of Calcium in the Isolated Cat	
Heart. Leslie E. Bailey and Harold A. Sures	259
The Effect of Acute Hypokalemia on the Myocardial Concentration and Body Distri-	
bution of Tritiated Digoxin in the Dog. Frank I. Marcus, Lana Nimmo, Geeta	
G. KAPADIA AND CARL GOLDSMITH	271
Zinc and Smooth Muscle Contractility. I. Study of the Mechanisms of Zinc-Induced	
Contractility Changes in Rat Uteri. E. E. Daniel, Sylvia Fair, A. M. Kidwai and I. Polacek	000
Zinc and Smooth Muscle Contractility. II. Zinc Content and Accumulation in Rat	202
Uterus and Their Relation to Contractility Changes from Zinc and Ousbain. E.	
E. Daniel, Sylvia Fair and A. M. Kidwai	290
The Activation of Glycogen Phosphorylase in Arterial Smooth Muscle. Donald H.	
Namm	299
Synthesis and Uptake of 5-Hydroxytryptamine by the Myenteric Plexus of the Guinea-	
Pig Ileum: A Histochemical Study. ROBERT G. ROBINSON AND MICHAEL D. GER- SHON	311
Stimulation of Serotonin Synthesis by Lithium. JORGE PEREZ-CRUET, ALESSANDRO	
TAGLIAMONTE, PAOLA TAGLIAMONTE AND GIAN L. GESSA	325
The Pharmacology of d- and l-Carnitine and d- and l-Acetylcarnitine: Comparison	001
with Choline and Acetylcholine. K. Blum, E. Seifter and J. Seifter Depolarizing Neuromuscular Block. Anibal Galindo	
Locus of Action of Centrally Acting Muscle Relaxants, Diazepam and Tybamate.	998
TSUI-CHIN TSENG AND S. C. WANG	350
Regulation of Hepatic Cholesterol Biosynthesis by Clofibrate Administration. Law-	
RENCE W. WHITE	361
In Vitro Metabolism of the N-Methylcarbamates, Zectran and Mesurol, by Liver, Kid-	
ney and Blood of Dogs and Rats. LARRY WHEELER AND ALLEN STROTHER	371
Effects of Carbon Tetrachloride on the Metabolism of Liver Glycogen in the Rat. R.	000
S. HICKENBOTTOM AND K. R. HORNBROOK.	383
The Effect of Chlorpromazine on the Toxicity and Biotransformation of Parathion in Mice. R. A. Vukovich, A. J. Triolo and J. M. Coon	205
The Antischistosomal Activity of a Nitrovinylfuran Derivative (SQ 18,506) in Mice	000
and Hamsters. Ernest Bueding, César Náquira, Sylvelin Bouwman and	
Geraldine Rose	402
Antischistosomal Activity of a Nitrovinylfuran Derivative (SQ 18,506) in Rhesus	
Monkeys. D.G. Erickson, J. G. Bourgeois, E. H. Sadun and E. Bueding	411
No. 3, September 1971	
Effects of 6-Hydroxydopamine on the Activity of Tyrosine Hydroxylase and Dopamine-	
β-Hydroxylase in Sympathetic Ganglia of the Rat. Stephen Brimijoin and	4177
PERRY B. MOLINOFF. A Sensitive Enzymatic Assay for Dopamine-β-Hydroxylase. PERRY B. MOLINOFF,	417
A Sensitive Enzymatic Assay for Dopamine-s-Hydroxylase. PERRY B. Molinoff,	49K

CONTENTS V

Chemical and Histochemical Studies on the Sympathetic Innervation of the Vas Deferens and Seminal Vesicle of the Guinea Pig. Arun R. Wakade and S. M. Kirpe-kar	
Acceleration of Catecholamine Formation in the Guinea-Pig Vas Deferens after Hypogastric Nerve Stimulation: Roles of Tyrosine Hydroxylase and New Protein Synthesis. NGUYEN B. THOA, DAVID G. JOHNSON, IRWIN J. KOPIN AND NORMAN	
Weiner Effects of Electrical Stimulation, α-Methyltyrosine and Desmethylimipramine on the	
Norepinephrine Contents of Neuronal Cell Bodies and Terminals. R. K. Bhat-	
NAGAR AND K. E. MOORE The Effect of Tyramine, Amphetamine and Metaraminol on the Metabolic Disposition of *H-Norepinephrine Released from the Adrenergic Neuron. F. H. LEITZ AND	
F. J. E. Stefano	
and Related Compounds. A. I. SALAMA, J. R. INSALACO AND R. A. MAXWELL An Evaluation of the Inability of Cocaine to Potentiate the Responses to Cardiac Sym-	474
pathetic Nerve Stimulation in the Dog. Robert L. Koerker and Neil C. Moran	482
Adrenergic Mechanisms in the Relaxation of Guinea-Pig Taenia Coli in Vitro. L. M.	
WEISENTHAL, C. C. Hug, Jr., N. W. WEISERODT AND P. BASS	
AND PETER F. MOORE	
The Cardiovascular Pharmacology of L(-)-Dopa: Peripheral and Central Effects. Melville W. Osborne, James J. Wenger and Wilhelmina Willems	E 17
Molecular CO ₂ Is Inert on Carotid Chemoreceptor: Demonstration by Inhibition of	
Carbonic Anhydrase. David M. Travis	529
Bronchodilator Activity of the Prostaglandins E ₁ and E ₂ . Marvin E. Rosenthale, Alphonse Dervinis and Jacob Kassarich	
Pulmonary Vascular Responses to Adenosine Diphosphate. A. L. Hyman, W. C.	
WOOLVERTON, D. G. PENNINGTON AND W. E. JAQUES.	
The Route of Absorption of Intraperitoneally Administered Compounds. George Lukas, Shirley D. Brindle and Paul Greengard	562
AND M. T. Bush	567
Oxidative Drug Metabolism in Human Liver Microsomes. EDWARD B. NELSON, P. PRITHVI RAJ, KENDRA J. BELFI AND BETTIE SUE SILER MASTERS	
bain in the Rat. RICHARD H. REUNING AND LEWIS S. SCHANKER	
The Effect of Hemorrhage on the Rate of Hexobarbital Biotransformation in the Dog. James F. Cumming, Harold W. McClung and Gilbert J. Mannering	
The Interaction of Drugs with the Conjugation of Tetrahydrocortisone and a Method for the Measurement of the Formation of its Glucuronide, in Vitro. Kenneth W.	
MILLER AND JAMES V. DINGELL	
Vivo) Attenuate Thermal Labilization of Isolated Hepatic Lysosomes. STANLEY	
H. Pollock and John H. Brown	
Action of Ouabain on Submaxillary Secretion in the Dog. J. RICARDO MARTÍNEZ Tolerance to a Behavioral Effect of Lysergic Acid Diethylamide and Cross-Tolerance	
to Mescaline in the Rat: Absence of a Metabolic Component. J. C. WINTER	625
Twitch Potentiation, Contractures and Alterations in Calcium Fluxes Produced by	
Tetraalkylammonium Ions. Edward G. Henderson and Robert L. Volle Index, Volume 178, July-September 1971	