

CONTENTS OF VOLUME 170

No. 1, NOVEMBER 1969

Parasympathetic Responses in Hyperthyroid Rats. ALAN FRAZER AND MARILYN E. HESS.....	1
The Effects of Thyroxine on Rat Heart Adenosine 3',5'-Monophosphate, Phosphorylase <i>b</i> Kinase and Phosphorylase <i>a</i> Activity. ALAN FRAZER, MARILYN E. HESS AND JOSEPH SHANFELD.....	10
The Effect of Ouabain on Sodium- and Potassium-Activated Adenosine Triphosphatase from the Hearts of Several Mammalian Species. TAI AKERA, FRAN S. LARSEN AND THEODORE M. BRODY.....	17
Interactions of Acetylcholine and Epinephrine on Contractility, Glycogen and Phosphorylase Activity of Isolated Mammalian Hearts. JACOB A. BLUKOO-ALLOTEY, NORMA H. VINCENT AND SIDNEY ELLIS.....	27
The Effect of Dipyrindamole on the Metabolism of Cardiac Muscle. DAI HYON YU AND M. I. GLUCKMAN.....	37
The Mechanism of Action of Guanethidine on the Isolated Mammalian Heart. S. PLUCHINO, A. J. MUSKUS AND R. PLUCHINO.....	44
Chemical Sympathectomy of the Cat with 6-Hydroxydopamine. G. HAEUSLER, W. HAEFELY AND H. THOENEN.....	50
Mechanism of the Sympathomimetic Action of Cyclohexylamine and Hexylamine: Release of Catecholamines from Nerve Endings. ANDREW S. WECHSLER, STEPHEN E. EPSTEIN AND GERALD GLICK.....	62
Blockade of Cardiac Effects of Isoproterenol by 4-(2-Hydroxy-3-Isopropylaminopropoxy)-Acetanilide (ICI 50,172). PITAMBAR SOMANI AND ATUL R. LADDU.....	72
Antiarrhythmic Actions of 4-(2-Hydroxy-3-Isopropylaminopropoxy)-Acetanilide (ICI 50,172) in the Dog Heart-Lung Preparation. ATUL R. LADDU AND PITAMBAR SOMANI.....	79
Action of Diphenylhydantoin on Rhythmicity and Contractility of Cultured Embryonic Heart Cells. MORRIS KLEINFELD, OTTO SCHADE AND FRANCES GRUEN.....	84
Pharmacologic Isolation of Sinoatrial Activity from Effects of Neural Excitation by Use of Tetrodotoxin. KOROKU HASHIMOTO AND SHIGETOSHI CHIBA.....	91
Effects of Chronic Pretreatment with Pargyline upon Responses of the Atrial Pacemaker and of Left Atrial Strips of Guinea Pigs to Tyramine, Mephentermine, <i>d</i> -Amphetamine and Adrenergic Nerve Stimulation. M. J. ANTONACCIO AND C. B. SMITH.....	97
Cardiac and Peripheral Effects of Dopamine Infusion in Endotoxin Shock in the Dog. LINDA L. SHANBOUR AND LERNER B. HINSHAW.....	108
On the Measurement of the Affinity of Partial Agonists for Receptors. D. R. WAUD.....	117
Effects of Potassium, Acetylcholine, Carbachol and Histamine on Na ²³ Movements in Ileal Smooth Muscle. GEORGE B. WEISS.....	123
The Relation of Changes in Sodium Transport to Protein-Bound Disulfide and Sulfhydryl Groups in the Toad Bladder Epithelium. A. FARAH, N. D. YAMODIS AND N. PESSAH.....	132
Drug Metabolism in Hypothermia. Uptake, Metabolism and Biliary Excretion of Pentobarbital-2-C ¹⁴ by the Isolated, Perfused Rat Liver in Hypothermia and Euthermia. SARAH C. KALSER, MARGARET P. KELLY, ELEANORE B. FORBES AND MARY M. RANDOLPH.....	145
The Effect of Hexafluorenum on the Neuromuscular Refractory Period of Anesthetized Man. RALPH A. EPSTEIN AND STEPHEN H. JACKSON.....	153
Differential Effects of Cholinergic Agonists on Self-Stimulation and Escape Behavior. MARIANNE E. OLDS AND EDWARD F. DOMINO.....	157
Factors Influencing the Incidence of Reversible Lens Opacities in Solitary and Aggregated Mice. MARTA WEINSTOCK AND A. S. MARSHALL.....	168
Studies on the Relative Insensitivity of the Immature Rat to the Neurotoxic Effects of 1,1,1-Trichloro-2,2-Bis(<i>p</i> -Chlorophenyl)Ethane (DDT). GARY L. HENDERSON AND DOROTHY E. WOOLLEY.....	173

No. 2, DECEMBER 1969

Some Effects of Pentobarbital and Strychnine on Transmission through the Ventrobasal Complex of the Cat Thalamus. ELEANOR E. HURLBRINK AND EUGENE S. BOYD.....	181
Comparative Effects of Reserpine on the Sleep Cycle of Man and Cat. JOEL S. HOFFMAN AND EDWARD F. DOMINO.....	190
A Brain Perfusion Technique Adapted for the Study of Drugs Which May Affect the Peripheral Circulation through a Central Action. JAMES B. BARRETT, ALPHONSE J. INGENITO AND LEONARD PROCITA.....	199
Centrally Mediated Peripheral Hypotensive Effects of Reserpine and Hydralazine When Perfused through the Isolated <i>in Situ</i> Cat Brain. ALPHONSE J. INGENITO, JAMES P. BARRETT AND LEONARD PROCITA.....	210
Catecholamine Uptake by Synaptosomes in Homogenates of Rat Brain: Stereospecificity in Different Areas. JOSEPH T. COYLE AND SOLOMON H. SNYDER.....	221
<i>In Vivo</i> Measurement of 5-Hydroxytryptamine Turnover Rate in the Rat Brain from the Conversion of C ¹⁴ -Tryptophan to C ¹⁴ -5-Hydroxytryptamine. ROBERT C. LIN, E. COSTA, N. H. NEFF, C. T. WANG AND S. H. NGAI.....	232
The Mode of Sodium Dependency of the Adrenergic Neuron Amine Carrier. Evidence for a Second, Sodium-Dependent, Optically Specific and Reserpine-Sensitive System. M. F. SUGRUE AND P. A. SHORE.....	239
Effect of False Transmitters on Norepinephrine Synthesis. IRWIN J. KOPIN, VIRGINIA K. WEISE AND GÖRAN C. SEDVALL.....	246
An Enzymatic Assay for Octopamine and Other β -Hydroxylated Phenylethylamines. PERRY B. MOLINOFF, LEWIS LANDSBERG AND JULIUS AXELROD.....	253
Combinations of <i>Alpha</i> and <i>Beta</i> Adrenergic Blockers in Isolated Guinea-Pig Atria. R. D. KRELL AND P. N. PATIL.....	262
Separation of the Effects of <i>Alpha</i> and <i>Beta</i> Adrenergic Receptor Stimulation on Taenia Coli. N. W. WEISBRODT, C. C. HUG, JR. AND P. BASS.....	272
Effect of Propranolol on Epinephrine-Induced Changes in Cardiac Rhythm and Arterial Potassium in Dogs Anesthetized with Cyclopropane. H. P. GUTGESELL, J. V. TEMTE AND Q. R. MURPHY.....	281
Mechanism of Vascular Resistance Changes Produced in Skin and Muscle by Halothane. JOHN M. AKESTER AND MICHAEL J. BRODY.....	287
Depression by Reflexes of the Pressor and Cardiotoxic Responses to Ouabain. RICHARD A. GILLIS, JOHN A. QUEST AND FRANK G. STANDAERT.....	294
Some Drug Effects on Calcium Movements in Aortic Strips. PATRICIA M. HUDGINS.....	303
The Effect of Ouabain on Calcium in Subcellular Fractions of Cardiac Muscle. DENISE CHIPPERFIELD AND WINIFRED G. NAYLER.....	311
Factors That Regulate Ouabain-H ⁺ Accumulation by the Isolated Guinea-Pig Heart. S. DUTTA AND B. H. MARKS.....	318
Simultaneous Assay of Angiotensin I and II and Determination of Converting Enzyme Activity. JACK D. BARRETT AND MOHINDER P. SAMBHI.....	326
Angiotensin Blocking Actions of Guancydine. J. R. CUMMINGS, A. N. WELTER, J. L. GRACE, JR. AND W. D. GRAY.....	334
Disulfiram Impairment of Drug Metabolism by Rat Liver Microsomes. BITTEN STRIPP, FRANK E. GREENE AND JAMES R. GILLETTE.....	347
The Metabolism of <i>R</i> (+)- and <i>RS</i> -Pentobarbital. KEITH H. PALMER, MARY S. FOWLER, MONROE E. WALL, L. SUE RHODES, WILLIAM J. WADDELL AND BILLY BAGGETT.....	355
The Ocular Effects of Repeated Dermal Applications of Dimethyl Sulfoxide to Dogs and Monkeys. EMIL R. SMITH, MARCUS M. MASON AND EUGENE EPSTEIN.....	364
The Effects of <i>N</i> - γ -Phenylpropyl- <i>N</i> -Benzyloxy Acetamide (W-1372) on Experimental Atherosclerosis and Hypercholesterolemia. F. M. BERGER, J. F. DOUGLAS, B. J. LUDWIG AND S. MARGOLIN.....	371
Index, Volume 170, November-December 1969.....	383