

## CONTENTS OF VOLUME 210

## No. 1, July 1979

Neuro-Cardiovascular Effects Produced by Bicuculline in the Cat. JOSEPH A. DiMICCO AND RICHARD A. GILLIS	1
Cholinergic Mechanisms in Heart: Interactions with 4-Aminopyridine. SHIRLEY E. FREEMAN	7
Characteristics of Hepatic Excretory Function during Development. STUART Z. CAGEN AND JAMES E. GIBSON	15
Ethanol-Induced Spontaneous Norepinephrine Release from the Rat Vas Deferens. NAEEMA C. DEGANI, EDWARD M. SELLERS AND KRZYSZTOF KADZIELAWA	22
Involvement of the Sodium-Potassium Pump in the Mechanism of Postjunctional Supersensitivity of the Vas Deferens of the Guinea Pig. W. T. GERTHOFFER, J. S. FEDAN, D. P. WESTFALL, K. GOTO AND W. W. FLEMING	27
A New Platelet Aggregation Inhibitor Which Possesses Hypolipemic and Uricosuric Properties, 2-[3-(2-Thiazolylthio) Phenyl]-Propionic Acid (TPA). D. H. MINSKER, G. M. FANELLI, JR., J. L. GILFILLAN, J. W. HUFF, P. JORDAN AND P. KLING	37
A Model of Cardiac Arrhythmias and Sudden Death: Cantharidin-Induced Toxic Cardiomyopathy. SIMON W. RABKIN, JANET M. FRIESEN, JOHN A. J. FERRIS AND HENRY Y. M. FUNG	43
Variation in Contractile Response Characteristics of Rabbit Aorta Strips with Surface of Drug Entry. R. PASCUAL AND J. A. BEVAN	51
Adrenergic Mechanisms in Postvagal Tachycardia. JERROD M. LOEB AND MARIO VASSALLE	56
Interaction of Lidocaine and Calcium on the Electrical Characteristics of Rabbit Atria. OSWALDO J. BETANCOURT AND PETER E. DRESEL	64
A Laboratory Animal Model for Malignant Hyperpyrexia. CHARLES G. DURBIN, JR. AND HENRY ROSENBERG	70
Spontaneous Histamine Secretion from Leukocytes in the Presence of Strontium. JOHN C. FOREMAN AND LAWRENCE M. LICHTENSTEIN	75
Effect of Tissue Adenosine 3':5'-Monophosphate on the Potassium Contracture of Myometrium: Role of Endogenous Norepinephrine. E. A. KROEGER	82
Additive Physical Dependence: Evidence for a Common Mechanism in Alcohol Dependence. JANET A. MCCOMB AND DORA B. GOLDSTEIN	87
Studies on the Behavioral and Biochemical Effects of Hemicholinium <i>in Vivo</i> . J. J. FREEMAN, J. R. MACRI, R. L. CHOI AND D. J. JENDEN	91
Effect of Cephaloridine on Respiration by Renal Cortical Mitochondria. BRUCE M. TUNE, KAI YIN WU, DORIS FRAVERT AND DAVID HOLTZMAN	98
Blockade by Saralasin of Adrenergic Potentiation Induced by Renin-Angiotensin System. B. G. ZIMMERMAN AND E. KRAFT	101
Arrest of Cultured Cells in the G <sub>1</sub> Phase of the Cell Cycle by Indomethacin. BARBARA M. BAYER, HOWARD S. KRUTH, MARTHA VAUGHAN AND MICHAEL A. BEAVEN	106
Further Studies of Glucocorticoid Effects on Spinal Cord Function: Single and Repetitive Monosynaptic Transmission and Apparent 1a Afferent Transmitter Turnover. EDWARD D. HALL AND THOMAS BAKER	112
Isolation of the Sino-Atrial Node with Veratramine. HAROLD A. SURES AND IAN R. INNES	116
The Role of Sympathetic Nervous System in the Vascular Actions of Dopamine. MUSTAFA F. LOKHANDWALA AND BHAGAVAN S. JANDHYALA	120
Disposition of Phenacetin in Dog and Man Determined by a Sensitive and Specific Radioimmunoassay. JOHN W. A. FINDLAY, RICHARD L. DEANGELIS, ROBERT F. BUTZ, JEFFREY B. SAILSTAD AND RICHARD M. WELCH	127
Evidence for Distinct Prostaglandin I <sub>2</sub> and D <sub>2</sub> Receptors in Human Platelets. OLGA V. MILLER AND ROBERT R. GORMAN	134
Pharmacological Evaluation of New Calcium Antagonists: 2-Substituted 3-Dimethylamino-5,6-Methylenedioxyindenes. Effects on Isolated Hearts and Coronary Vessels. MARY F. PIASCIK, RALF G. RAHWAN AND DONALD T. WITIAK	141
Action of Indomethacin on Furosemide-Induced Renin Release in the Dog and the Rat. LUIZ NASCIMENTO, ALFREDO J. FIALLO, MARÍA T. NEGRÓN, NIVIA CRUZ, JOSÉ M. AYALA, RAFAEL BAQUERO AND MANUEL MARTÍNEZ-MALDONADO	147

## No. 2, August 1979

Effects of Goniopora Toxin, a Polypeptide Isolated from Coral, on Electromechanical Properties of Rabbit Myocardium. MOTOHATSU FUJIWARA, IKUNOBU MURAMATSU, HIROYOSHI HIDAKA, SHINOBU IKUSHIMA AND KATSURO ASHIDA	153
The Behavioral Effects of <i>d</i> -Amphetamine Alone and in Combination with Acute and Chronic Morphine Treatments in Rats. JAMES B. LUCOT, D. E. McMILLAN AND J. DAVID LEANDER	158
Inhibition by Pentobarbital of the Acetylcholine Release from the Post-ganglionic Parasympathetic Neuron of the Heart. RUTH LINDMAR, KONRAD LÖFFELHOLZ AND WOLFGANG WEIDE	166

Electroencephalographic and Behavioral Tolerance to and Cross-Tolerance between D-Ala <sup>2</sup> -Methionine-Enkephalinamide and Morphine in the Rat. FRANK C. TORTELLA, J. EDWARD MORETON AND NAIM KHAZAN	174
Effect of Phenytoin (DPH) Treatment on Methoxyflurane Metabolism in Rats. GEORGE H. CAUGHEY, SUSAN A. RICE, JON C. KOSEK AND RICHARD I. MAZZE	180
Urate Excretion: Drug Interactions. G. M. FANELLI, JR. AND I. M. WEINER	186
Effects of Norcocaine and Some Norcocaine Derivatives on Schedule-Controlled Behavior of Pigeons and Squirrel Monkeys. R. D. SPEALMAN, S. R. GOLDBERG, R. T. KELLEHER, W. H. MORSE, D. M. GOLDBERG, C. G. HAKANSSON, K. A. NIEFORTH AND E. S. LAZER	196
Behavioral Effects of Self-Administered Cocaine: Responding Maintained Alternately by Cocaine and Electric Shock in Squirrel Monkeys. ROGER D. SPEALMAN AND R. T. KELLEHER	206
Multiple Effects of Guanosine Triphosphate on <i>Beta</i> Adrenergic Receptors and Adenylate Cyclase Activity in Rat Heart, Lung and Brain. LINDA R. HEGSTRAND, KENNETH P. MINNEMAN AND PERRY B. MOLINOFF	215
Electrophysiological Effects of Mexiletine (Kö1173) on Ovine Cardiac Purkinje Fibers. FRANCIS M. WELD, J. THOMAS BIGGER, JR., DANIEL SWISTEL, JOHN BORDIUK AND YAT H. LAU	222
Cellular Pharmacology of 7(R)-O-Methylnogaro1: A New Anticancer Agent. MERRILL J. EGORIN, RONALD E. CLAWSON, JEFFREY L. COHEN, LOUIS A. ROSS AND NICHOLAS R. BACHUR	229
Pharmacokinetics of Heparin. I. Studies of Dose Dependence in Rats. THORIR D. BJORNSSON AND GERHARD LEVY	237
Pharmacokinetics of Heparin II. Studies of Time Dependence in Rats. THORIR D. BJORNSSON AND GERHARD LEVY	243
Evidence for Luminal Uptake of Gentamicin in the Perfused Rat Kidney. VIRGINIA U. COLLIER, PAUL S. LIETMAN AND WILLIAM E. MITCH	247
Analysis of the Cardiac Stimulant Properties of (3,4-Dihydroxyphenyl)-Cyclopropylamine (ASL-7003) and 2-Amino-6,7-Dihydroxy-1,2,3,4-Tetrahydronaphthalene (A6,7DTN). R. J. GORCZYNSKI, W. G. ANDERSON, P. W. ERHARDT AND D. M. STOUT	252
Alterations in High-Affinity Choline Uptake in Brain after Acute and Chronic Ethanol Treatment. WALTER A. HUNT, EDWARD MAJCHROWICZ AND THOMAS K. DALTON	259
The Effects of Amiloride and Ouabain on Urinary Acidification by Turtle Bladder. RUSSELL F. HUSTED AND PHILIP R. STEINMETZ	264
An Electrophysiological Analysis of the Effects of Paraoxon at the Neuromuscular Junction. MICHAEL B. LASKOWSKI AND WOLF-D. DETTBARN	269
Depression of Adenosine Triphosphatase Activities in Isolated Liver Surface Membranes of 2,3,7,8-Tetrachlorodibenzo- <i>p</i> -Dioxin-Treated Rats: Correlation with Effects on Ouabain Biliary Excretion and Bile Flow. RICHARD E. PETERSON, B. V. MADHUKAR, K. H. YANG AND FUMIO MATSUMURA	275
Effects of a Prostaglandin E <sub>1</sub> Derivative, SC-29333, and Aspirin on Gastric Ionic Fluxes and Potential Differences in Dogs. DOUGLAS G. COLTON, DAVID A. CALLISON AND ESAM. Z. DAJANI	283
The Effects of Phenytoin and Lidocaine on a Proprioceptor of the Cockroach, <i>Blaberus discoidalis</i> : A Simple Method for Discriminating between Inhibitors of Sensory Transduction and Axonal Conduction. STANLEY M. SPINOLA, MICHAEL P. LILLY, THOMAS M. MAHANY AND ARTHUR RAINES	289
Isoproterenol Excretion and Metabolism in the Isolated Perfused Rat Kidney. STANLEY J. SZEFLER AND MARGARET ACARA	295
Human Drug Self-Administration: Double-Blind Comparison of Pentobarbital, Diazepam, Chlorpromazine and Placebo. ROLAND R. GRIFFITHS, GEORGE BIGELOW AND IRA LIEBSON	301

## No. 3, September 1979

Microiontophoretic Studies on Noradrenergic Inhibition from Locus Coeruleus of Spinal Trigeminal Nucleus Neurons. MASASHI SASA, SAKAE FUJIMOTO, SEISHI IGARASHI, KATSUNORI MUNEKIYO AND SHUJI TAKAORI	311
Clofibrate Displaces Warfarin from Plasma Proteins in Man: An Example of a Pure Displacement Interaction. THORIR D. BJORNSSON, PETER J. MEFFIN, SARAH SWEZEY AND TERRENCE F. BLASCHKE	316
Effects of Clofibrate and Warfarin Alone and in Combination on the Disposition of Vitamin K <sub>1</sub> . THORIR D. BJORNSSON, PETER J. MEFFIN, SARAH E. SWEZEY AND TERRENCE F. BLASCHKE	322
Dissociation between Opiate-Like and Antidiarrheal Activities of Antidiarrheal Drugs. C. J. E. NIEMEGEREERS, J. L. MCGUIRE, J. J. P. HEYKANTS AND P. A. J. JANSSEN	327
Comparative Nephrotoxicities of Gentamicin, Netilmicin and Tobramycin in the Rat. LEONARDO SOBERON, RALPH L. BOWMAN, ENRIQUE PASTORIZA-MUNOZ AND GEORGE J. KALOYANIDES	334
Vasopressin Stimulates Thromboxane Synthesis in the Toad Urinary Bladder: Effects of Imidazole. RONALD M. BURCH, DANIEL R. KNAPP AND PERRY V. HALUSHKA	344
Effect of Cholera Enterotoxin on Pacemaker Rate and Cyclic Adenosine 3':5'-Monophosphate in Isolated Rabbit Sinoatrial Node. TAKASHI TANIGUCHI, MOTOHATSU FUJIWARA, JEUNG JA LEE AND HIROYOSHI HIDAKA	349
Consequent Events as Determinants of Drug Effects on Schedule-Controlled Behavior: Modification of Effects of Cocaine and <i>d</i> -Amphetamine Following Chronic Amphetamine Administration. MARC N. BRANCH	354

The Effects of Opiates on the Levels of Cyclic 3':5'-Guanosine Monophosphate in Discrete Areas of the Rat Central Nervous System. JAMES P. O'CALLAGHAN, QUINTUS CHESS, CHRISTINE MCKIMMEY AND DORIS H. CLOUET	361
Role of Peripheral Adrenoreceptors and Vasopressin in the Suppression of Plasma Renin Activity by L-Dopa in Carbidopa-Treated Dogs. MARTHA L. BLAIR, IAN A. REID, LANNY C. KEIL AND WILLIAM F. GANONG	368
Synergistic Actions of Propantheline Bromide with Cimetidine and Thiopropazate Hydrochloride in the Prevention of Stress Ulcer Formation in Rats. ESAM Z. DAJANI, ROBERT G. BIANCHI AND DAVID W. CALHOUN	373
Blockade of Myocardial Slow Channels by Bepridil (CERM-1978). STEVE VOGEL, RICHARD CRAMPTON AND NICK SPERELAKIS	378
Analysis of the Effect of Indomethacin on the Response to Furosemide in Man: Effect of Dose of Furosemide. D. CRAIG BRATER	386
Warfarin Enantiomer Disposition: Determination by Stereoselective Radioimmunoassay. C. E. COOK, NOEL H. BALLENTINE, TATIANA B. SELTZMEN AND C. RAY TALLENT	391
Effects of Systemic and Intraventricular Administration of Cannabinoids on Schedule-Controlled Responding in the Squirrel Monkey. JOHN M. CARNEY, ROBERT L. BALSTER, BILLY R. MARTIN AND LOUIS S. HARRIS	399
Mechanism of Inhibition of Renal Prostaglandin Production by Acetaminophen. MICHAEL B. MATTAMMAL, TERRY V. ZENSEN, WENDY W. BROWN, CEIL A. HERMAN AND BERNARD B. DAVIS	405
Effects of Prostaglandins E <sub>1</sub> and E <sub>2</sub> on the Maximal Capacity of the Dog Kidney to Reabsorb Glucose. J. W. STRANDHOY, G. W. DOYLE AND T. E. ZOOK	410
The Effect of Anthopleurin-A on Crayfish Giant Axon. PHILLIP A. LOW, CHAU H. WU AND TOSHIO NARAHASHI	417
Comparison of the Effects of the Isomers of Amphetamine, Methylphenidate and Deoxypipradrol on the Uptake of <i>l</i> -[ <sup>3</sup> H]-Norepinephrine and [ <sup>3</sup> H]Dopamine by Synaptic Vesicles from Rat Whole Brain, Striatum and Hypothalamus. R. M. FERRIS AND F. L. M. TANG	422
Cardiac Inotropic <i>Beta</i> Adrenoceptors are Fully Active at Low Temperature. B. G. BENFEY	429
Agonist-Induced Changes in <i>Beta</i> Adrenergic Receptor Density and Receptor-Mediated Responsiveness in Slices of Rat Cerebral Cortex. MARK D. DIBNER AND PERRY B. MOLINOFF	433
Investigation of the Drug-Binding Defect in Plasma from Rats with Glycerol-Induced Acute Renal Failure. CHRISTOPHER J. BOWMER AND W. EDWARD LINDUP	440
Anesthetics: Molecular Correlates of Voltage- and Frequency-Dependent Sodium Channel Block in Nerve. JOAN J. KENDIG, KENNETH R. COURTNEY AND ELLIS N. COHEN	446
Pharmacodynamic Profiles of <i>l</i> - $\alpha$ -Acetylmethadol (LAAM) and Its N-Demethylated Metabolites, Nor-LAAM and Dinor-LAAM, during Self-Administration in the Dependent Rat. GERALD A. YOUNG, GEORGE F. STEINFELS AND NAIM KHAZAN	453
The Influence of Endogenous Glucagon Release on Hyperglycemic Responses to Catecholamines in Normal Fed and Diabetic Rats. LEE C. WOODSON AND DAVID E. POTTER	458
Index, Volume 210, July-September 1979	465