CONTENTS OF VOLUME 53

Restoration of Suppressed Baroreflex Sensitivity in Rats with Hereditary Diabetes Insipidus (Brattleboro Rats) by Arginine-Vasopressin and DDAVP.
Yutaka Imai, Peter L. Nolan, and Colin I. Johnston .................................................. 140

β-Endorphin Acting on the Brainstem is Involved in the Antihypertensive Action of Clonidine and α-Methyldopa in Rats.
Maria Delores Ramirez-Gonzalez, Liouben Tchakarov, Rogelio Mosqueda Garcia, and George Kunos .................................................. 150

Acetylcholine Increases Resting Membrane Potassium Conductance in Atrial but Not in Ventricular Muscle during Muscarinic Inhibition of Ca**-Dependent Action Potentials in Chick Heart.
Daitsuke Inoue, Mitsugu Hachisu, and Achilles J. Pappano ........................................... 158

Mechanism of Canine Coronary Artery Relaxation by Monensin.
Harry L. Anderson, III, Raymond J. Winquist, R. Clinton Webb, and David F. Bohr .................................................. 168

Reduced Space Constant in Slowly Conducting Regions of Chronically Infarcted Canine Myocardium.
Joseph F. Spear, Eric L. Michelson, and E. Neil Moore .................................................. 176

Bernard M. Searle, Hirohiko Higashino, Fikry Khalil, John D. Bogden, Aijiroh Tokushige, Hirokazu Tamura, Minoru Kino, and Abraham Aviv .................................................. 186

The Effects of Inhibition of Oxidative Phosphorylation and Glycolysis on Contractility and High-Energy Phosphate Content in Cultured Chick Heart Cells.
Andrew J. Doorey and William H. Barry .................................................. 192

Synergistic Effects of Acute Hypoxemia and Hypercapnic Acidosis in Conscious Dogs: Renal Dysfunction and Activation of the Renin-Angiotensin System.
C. Edward Rose, Jr., David P. Kimmel, Richard L. Godine, Jr., Donald L. Kaiser, and Robert M. Carey .................................................. 202

R.R. Garcia-Szabo, MB. Peterson, W.D. Watkins, R. Bizios, D.L. Kong, and A.B. Malik .................................................. 214

Gary B. Guo, Marc D. Thames, and Francois M. Abboud .................................................. 223

Salvage of Myocardial Function by Coronary Artery Reperfusion 1, 2, and 3 Hours after Occlusion in Conscious Dogs.
Michel Lavallée, David Cox, Thomas A. Patrick, and Stephen F. Vatner .................................................. 235

Synergistic Effects of Acute Hypoxemia and Hypercapnic Acidosis in Conscious Dogs: Renal Dysfunction and Activation of the Renin-Angiotensin System.
C. Edward Rose, Jr., David P. Kimmel, Richard L. Godine, Jr., Donald L. Kaiser, and Robert M. Carey .................................................. 202

R.R. Garcia-Szabo, MB. Peterson, W.D. Watkins, R. Bizios, D.L. Kong, and A.B. Malik .................................................. 214

Gary B. Guo, Marc D. Thames, and Francois M. Abboud .................................................. 223

Salvage of Myocardial Function by Coronary Artery Reperfusion 1, 2, and 3 Hours after Occlusion in Conscious Dogs.
Michel Lavallée, David Cox, Thomas A. Patrick, and Stephen F. Vatner .................................................. 235

Recovery of Left Ventricular Segmental Function after Long-Term Reperfusion Following Temporary Coronary Occlusion in Conscious Dogs: Comparison of 2- and 4-Hour Occlusions.
Larry R. Bush, L. Maximilian Buja, Wade Samowitz, Robert E. Rude, Mark Wathen, Gregory D. Tilton, and James T. Willerson .................................................. 248

P. Savard, D. Cohen, E. Lepeschkin, B.N. Cuffin, and J.E. Madias .................................................. 264

BRIEF COMMUNICATIONS
Magnetic Measurements of S-T and T-Q Segment Shifts in Humans: Part II: Exercise-Induced S-T Segment Depression.
D. Cohen, P. Savard, R.D. Rifkin, E. Lepeschkin, and W.E. Strauss .................................................. 274

NEWS FROM THE AMERICAN HEART ASSOCIATION .................................................. 280

No. 3 (September)

Actions of Adenosine and Isoproterenol on Isolated Mammalian Ventricular Myocytes.
Luiz Belardinelli and Gerrit Isenberg .................................................. 287

Renal Adrenoceptor Mediation of Antinatriuretic and Renin Secretion Responses to Low Frequency Renal Nerve Stimulation in the Dog.
Jeffrey L. Osborn, Hallward Holdaas, Marc D. Thames, and Gerald F. DiBona .................................................. 298

Effect of Positive Inotropic Agents on the Relation between Oxygen Consumption and Systolic Pressure Volume Area in Canine Left Ventricle.
Hiroyuki Suga, Ryuichi Hisano, Yoichi Goto, Osamu Yamada, and Yuichiro Igarashi .................................................. 306

Mary E. Todd, Catherine G. Laye, and David N. Osborne .................................................. 319

Contractile Function, Myosin ATPase Activity and Isozymes in the Hypertrophied Pig Left Ventricle after a Chronic Progressive Pressure Overload.
Thomas Wisenbaugh, Paul Allen, George Cooper IV, Henry Holzgreve, George Beller, and Blase Carabello .................................................. 332
CONTENTS OF VOLUME 53

The Dependence of Unloaded Shortening Velocity on Ca**, Calmodulin, and Duration of Contraction in "Chemically Skinned" Smooth Muscle.
Richard J. Paul, Glenn Doerman, Claudia Zeugner, and J. Casper Ruegg 342

Compartmentalization of Adriamycin and Daunomycin in Cultured Chick Cardiac Myocytes: Effects on Synthesis of Contractile and Cytoplasmic Proteins.
William Lewis, Marlene Galizi, and Saul Puskin 352

Intracardiac Flow Patterns in Early Embryonic Life: A Reexamination.
Hitoshi Yoshida, Frank Manasek, and Rene A. Arcilla 363

Rabbit Arterial Endothelium and Subendothelium: A Change in Interfacial Free Energy that May Promote Initial Platelet Adhesion.
John F. Boyce, Philip C. Wong, Samuel C. Schurch, and Margot R. Roach 372

Myocardial Healing and Repair after Experimental Infarction in the Rabbit.

Mechanism of Constriction of Large Coronary Arteries by β-Adrenergic Receptor Blockade.
Stephen F. Vatter and Thomas H. Hintze 389

Direct Determination of Vasa Recta Blood Flow in the Rat Renal Papilla.
Christopher Holliger, Kevin V. Lemly, Susan L. Schmitt, Frances C. Thomas, Channing R. Robertson, and Rex L. Jamison 401

BRIEF COMMUNICATIONS

Differences in Thallium-201 Uptake in Reperfused and Nonreperfused Myocardial Infarction.
Jacques A. Melin, Lewis C. Becker, and Bernadine Healy Bulkley 414

Natriuretic Activity of Human and Monkey Atria.
Moufied N. Nemeh and Joseph P. Gilmore 420

Morphology of Rapidly Frozen Aortic Endothelial Cells: Glutaraldehyde Fixation Increases the Number of Caveolae.
Paul G. McGuire and T. Alan Twietmeyer 424

NEWS FROM THE AMERICAN HEART ASSOCIATION 430

No. 4 (October)

Glomerular Ultrafiltration Coefficient after Ischemic Renal Injury in Dogs.
Virginia J. Savin, Ram V. Patak, Garrett Marr, Arlo S. Hermreck, Steven M. Ridge, and Kristy Lake 439

The Effect of Intracellular Oxygen Concentration on Lactate Release, Pyridine Nucleotide Reduction, and Respiration Rate in the Rat Cardiac Tissue.
Ryuichiro Araki, Mamoru Tamura, and Isao Yamazaki 448

Vibratory Ventilation Decreases Filtration of Fluid in the Lungs of Newborn Lambs.
J. Usha Raj, Robert B. Goldberg, and Richard D. Bland 456

Age-Associated Alterations in Viscoelastic Properties of Canine Aortic Strips.
Frank C.P. Yin, Harold A. Spurgeon, and Clayton H. Kailman 464

Evidence that Serotonin Receptors Mediate the Cutaneous Vasocostriction Produced by 5-Hydroxytryptamine in Canine Forelimbs.
David E. Dobbins, Stan W. Adamski, Mustafa F. Lokhandwala, and George J. Grega 473

Effects of Cations, Phospholipases, and Neuraminidase on Calcium Binding to "Gas-Dissected" Membranes from Cultured Cardiac Cells.
G.A. Langer and L.M. Nudd 482

Vascular Smooth Muscle Cell Hypertrophy and Hyperploidy in the Goldblatt Hypertensive Rat.
Gary K. Owens and Stephen M. Schwartz 491

Christopher K. Zarins, Don P. Giddens, B.K. Bharadway, Vikrom S. Sottiurai, Robert F. Mabon, and Seymour Glasgow 502

The Oxygen Sensitivity of Hamster Cheek Pouch Arterioles: In Vitro and in Situ Studies.
William F. Jackson and Brian R. Duling 515

Propagation through Electrically Coupled Cells: Effects of Regional Changes in Membrane Properties.
Ronald W. Joyner, John Picone, Richard Veenstra, and David Rawling 526

BRIEF COMMUNICATIONS

Vasoactive Intestinal Peptide Inhibitory Innervation in Bovine Mesenteric Lymphatics: A Histochemical and Pharmacological Study.
Toshio Ohhashi, John A. Olschowka, and David M. Jacobowitz 535