Editorials

Interlingua Summaries .................................................. Alexander Gode 1
Dynamic Reactions Induced by Compression of an Artery .......... Carl J. Wiggers 4

Some Effects of Partial Pulmonary Valvectomy

Noble O. Fowler, Edgar P. Mannix and William Noble 8

The Histology of the Common Carotid Baroceptor Areas of the Cat. . . J. Boss and J. H. Green 12

Circulatory and Renal Effects Following Transfusion of Human Blood and its Components to Dogs ........................................ Hadley L. Conn, Jr., John C. Wood and John C. Rose 18

The Relation of a Venous-Arteriolar Reflex to Transmural Pressure and Resistance in Small and Large Systemic Vessels .. Francis J. Haddy and Robert P. Gilbert 25

Studies on Mitral Valve Function Effect of Acute Hypervolemia, Premature Beats and Other Arrhythmias ................................ Ben Friedman, William M. Daily and Russell H. Wilson 33

Comparison of Changes in Mesenteric Resistance Following Splanchnic Nerve Stimulation with Responses to Epinephrine and Norepinephrine .......... C. P. Deat, Jr. and Harold Green 38

Cardiac Resuscitation and Neurologic Tolerance to Anoxia

Raymond C. Read, C. Walton Lillehei and Richard L. Varco 45

Reflex Alterations in Venomotor Tone Produced by Venous Congestion .......... Robert S. Alexander 49

The Hypocholesterolizing Effect of Gallogen and its Potentiation by Soybean Sterols

Thomas B. Clarkson, J. Stanton King, Jr. and Nelta Ilyder Warnock 54

Cortisone Hypertension in Potassium-Deficient Rats with a Renal Ligature

Ray H. Rosenman, S. Charles Freed and Shirley St. George 57

Production of Hyperlipemia and Early Atherosclerosis in Rabbits by a High Vegetable Fat Diet ........................................... Alfred Steiner and Seymour Dayton 62

Effects of Pulmonary Embolism on the Pulmonary Circulation with Special Reference to Arteriovenous Shunts in the Lung ............ Albert H. Niden and Domingo M. Aviada, Jr. 67

The Continuous Recording of Central Venous Pressure Changes from an Arm Vein

Otto H. Gauer and Herbert O. Sicker 74

Changes in Central Venous Pressure after Moderate Hemorrhage and Transfusion in Man

Otto H. Gauer, James P. Henry and Herbert O. Sicker 79

Evidence of the Atrial Location of Receptors Influencing Urine Flow

James P. Henry, Otto H. Gauer and J. L. Reeves 85

The Effect of Moderate Changes in Blood Volume on Left and Right Atrial Pressures

James P. Henry, Otto H. Gauer and Herbert O. Sicker 91

An Analysis of Normal and Abnormal Left Atrial Pressure Pulse in Man

Jay L. Ankeney, Alfred P. Fishman and Harry W. Fritts, Jr. 95

Time Relationship of Dynamic Events in the Cardiac Chambers, Pulmonary Artery and Aorta in Man ............ Eugene Braunwald, Alfred P. Fishman and André Courmand 100

Production of Atrial Fibrillation in Dogs by Thyroid Administration and Acetylcholine Injection ................................. Phillip E. Loweke 108

The Initiation of Ventricular Tachycardia and Fibrillation by Procaine in the Isolated-Perfused Rabbit Heart ........................................ Leonard Grumbach 112
American Heart Association .......................................................... 119
Contributors to this Issue ............................................................ 121

No. 2

Editorials

Current Trends in Atherosclerosis Research .............................. Louis N. Katz 123
Initiation of the Blood Coagulation Mechanisms ..................... Walter H. Seegers 126
Committee Report, Lipid Nomenclature .................................... 129
The Coronary Blood Flow in Pulmonary Emphysema and Cor Pulmonale

Leonard B. Rose and David L. Hoffman 130

Effect of X-Irradiation and Beta Emanation on Circulation in the Hamster Cheek Pouch
George P. Fulton, Brenton R. Lutz and Roma Kagan 133

Oxygen Consumption of the Com pletely Isolated Dog Heart in Fibrillation
Oleg Jardetzky, Ernest A. Green and Victor Lorber 144

Factors Altering the Filling of the Isolated Left Ventricle of the Dog Heart. Effects of Ephinephrine and Norepinephrine ............. N. M. Buckley, M. Sidky and E. Ogden 148

The Effect of Beta Sitosterol upon Intestinal Absorption of Cholesterol in the Rat
Meyer Friedman, Ray H. Rosenman and Sanford O. Byers 157

The Hypocholesterolizing Effect of Drugs—Fed Singly and in Combination—on Cholesterol-fed Cockerels ................. J. Stanton King, Jr., Thomas B. Clarkson and Nella Hyder Warnock 162

The Effect of Potassium on the Occurrence of Petechial Hemorrhages in Renal Hypertensive Rabbits ................................. David B. Gordon and Douglas R. Drury 167

Dynamics of Complete Right Ventricular Failure in Dogs Maintained with an Extracorporeal Left Ventricle ....................... John C. Rose, Eric J. Lazaro and Herbert P. Broida 173

The Reduction of Autoprothrombin II Activity with Dicumarol
Shirley A. Johnson and Walter H. Seegers 182

Estimation of the Residual Volume of the Ventricle of the Dog's Heart by Two Indicator Dilution Techniques ........................ J. P. Holt 187

The Excitability Cycle of the Dog's Left Ventricle Determined by Anodal, Cathodal and Bipolar Stimulation ...................... R. Th. van Dam, D. Durrer, J. Strackee and L. H. van der Tweel 196

Baroreceptor Function in Chronic Renal Hypertension
J. W. McCubbin, J. H. Green and Irvine H. Page 205

An Experimental Study of Burger Triangles Constructed from Toad Hearts in situ
Zang Z. Zhao 211

Cardiac Dilatation without Hypertrophy from Reduced Ambient Pressure in Rats
J. Clifford Stickney, David W. Northrup and Edward J. Van Liere 217

Serum Transaminase Levels in Experimental Pulmonary Infarction
Clarence M. Agress, Harvey F. Glassner and Howard I. Jacobs 220

The Collaterals of the Coronary Arteries in Normal and Pathologic Hearts
Giorgio Baroldi, Oreste Mantero and Giuseppe Scomazzoni 223

Book Reviews ................................................................. 230

American Heart Association ................................................... 231
Contributors to this Issue ...................................................... 239

No. 3

Editorial

Mechanism of Circulatory Failure in Fresh and Sea Water Drowning .......... H. G. Swann 241
Theoretic Limitations of the Nitrous Oxide Method for the Determination of Regional Blood Flow .......................... Leo A. Sapirstein and Eric Ogden 245
Production of Endocarditis with *Staphylococcus aureus* and *Streptococcus mitis* in Dogs with Aortic Insufficiency

Benjamin Highman, Joseph Roshe and Paul D. Allland 250

Planar Dipole Loops

Ernest Frank 257

Histochemical Evaluation of Canine Coronary Artery and Aortic Lesions Induced by Intravenous Allylamine

L. L. Conrad, I. E. Gonzalez, W. Joel and R. H. Furman 263

The “After-Drop” in Venous Occlusion Plethysmograms

M. J. Allbrook 268

Studies with the Ganglionic Blocking Agent, Chlorisondamine Chloride in Unanesthetized and Anesthetized Dogs

R. A. Maxwell, A. J. Plummer and M. W. Osborne 276

Mechanism of Experimental Atrial Flutter

A. Lanari, A. Lambertini and A. Ravin 282

The Effect of KCl on Atrial Fibrillation Caused by Acetylcholine

J. H. Burn, A. J. Gunning and J. M. Walker 288

The Initiation of Ventricular Tachycardia and Fibrillation in Isolated Hearts by Potassium Chloride

L. Grumbach 293

Effect of a Cardiac Glycoside (Cedilanid) on the Sodium and Potassium Balance of the Human Heart

F. Gonlubol, A. Stiegel and R. J. Bing 298

Cardiac Responses to Sympathetic Stimulation

Jorge Anzola and Robert F. Rushmer 302

The Effects of Dicumarol on the Transvascular Exchange of T-1824-Labeled Protein in Rabbits

Thomas E. Nelson, Jr., Elisa Castronova and Chester Hyman 307

The Electric Heart Center for the QRS Complex in Cardiac Patients

George E. Seiden 313

Hemodynamic Effects of Anemia with and without Plasma Volume Expansion

Noble O. Faoler, Robert H. Franch and Walter L. Bloom 319

Mechanical vs. Reflex Effects of Diffuse Pulmonary Embolism in Anesthetized Dogs

M. Henry Williams, Jr. 325

The Action of Acetylcholine and Epinephrine on the Cellular Membrane Potentials and Contractility of Rat Atrium

J. Leyden Webb and Philip B. Hollander 332

Movements of the Mitral Valve

Robert F. Rushmer, Bliss L. Finlayson and Alden A. Nash 337

Coronary Vasodilator Properties of Purine and Pyrimidine Derivatives

Mary M. Wolf and Robert M. Berne 343

Books Received and Reviewed

349

American Heart Association

350

Contributors to This Issue

353

No. 4

Editorial

Why Attend Scientific Meetings?

Carl J. Wiggers 355

Physiologic Evidence for a Dual A-V Transmission System

Gordon K. Moe, James B. Preston and Harold Burlington 357

Placental Transfer of Radioactive Digitoxin in Pregnant Women and Its Fetal Distribution

George T. Okita, Ernest J. Plots and M. Edwards Davis 376

The Left Atrial Pressure Pulses in Experimental Mitral Valve Lesions

O. M. Haring, C. K. Liu and H. D. Trace 381

The Effectiveness of Hypertonic Glucose in Resuscitation of the Hypothermic Heart Following Potassium Chloride Arrest

George E. Mavor, Richard K. McEvoy and Earle B. Mahoney 389

Influence of Pulmonary Arterial and Left Atrial Pressures on Pulmonary Vascular Resistance

Hana G. Borst, Maurice McGregor, James L. Whittenberger and Erik Berglund 393

Measurement of Pulmonary Blood Flow Using the Indicator-Dilution Technic in Patients with a Central Arteriovenous Shunt

Alfredo A. Ramirez de Arellano, Peter S. Hutzel and Earl H. Wood 400
The Importance of Sex in the Variability of the Cholesteremic Response of Rabbits Fed Cholesterol

Louis C. Fillios and George V. Mann 406

Demonstration of Preferential Flow of Blood from Inferior Vena Cava and from Right Pulmonary Veins Through Experimental Atrial Septal Defects in Dogs

Arthur W. Silver, John W. Kirklin and Earl H. Wood 413

Distribution of Blood (Fe\(^{69}\)) and Plasma (I\(^{131}\)) Volumes of Rats Determined by Liquid Nitrogen Freezing

Newton B. Everett, Barbara Simmons and Earl P. Lasher 419

Theory and Experiments on Schematized Models of Stenosis

H. C. Burger, A. G. W. van Brummelen and F. J. Dannenburgh 425

Quantitative Method for the In Vivo Testing of Fibrinolytic Agents: Effect of Intravenous Trypsin on Radioactive Thrombi and Emboli

J. L. Ambrus, N. Back, E. Mihalyi and Clara M. Ambrus 430

In Vivo Fibrinolytic Activity and Pharmacology of Various Plasmin (Fibrinolysin) Preparations

N. Back, J. L. Ambrus, S. Goldstein and J. W. E. Harrison 440

Intrinsic Deflections, Local Excitation and Transmembrane Action Potentials

Toyomi Sano, Masaru Ono and Takio Shimamoto 444

Amplifier for Linear Recording of Oxygen Saturation and Dye Dilution Curves

Curt Wiederhöld 450

Measurement of Circulation Times with NaI\(^{131}\) Reginald A. Shipley and Robert E. Clark 456

The Pathway of Ventricular Depolarization in the Dog

Allen M. Scher and Allan C. Young 461

The Augmentor Action of the Sympathetic Cardiac Nerves

Walter C. Randall and Wayne G. Rohse 470

The Aortic Flow Pulse as Related to Differential Pressure

Merrill P. Spencer and Adam B. Denison 476

Effects of Beta Sitosterol on Regression of Cholesterol Atherosclerosis in Rabbits

William T. Beher, William L. Anthony and Gizella D. Baker 485

Partial Separation of an Oxytocic Principle from Preparations of Angiotonin

F. Merlin Bumpus, Hans Schwarz and Irvine H. Page 488

Catheter Induced Error in Hepatic Venous Sampling

Leo A. Sapirstein and Edward J. Reininger 493

A Muscle Column Preparation from the Rat's Left Ventricle

William C. Ulrick and William V. Whitehorn 499

Book Reviews

William C. Ulrick and William V. Whitehorn 502

American Heart Association

504

Contributors to this Issue

508

No. 5

Editorial

Determinants of Cardiovascular Anomalies

M. M. Nelson, I. W. Monie and H. M. Evans 511

Experimental Evidence of Ventricular Diastolic Suction

Gerhard A. Brecher 513

Contractility and Extractability of Heart Actomyosin After Death

L. Dettli and R. J. Bing 519

Effect of Hypothermia on Oxygen Consumption and Energy Utilization of Heart

Henry Badeer 523

Complete Prevention of Cerebral Accidents in Malignant Hypertension

André Robert 527

Influence of Anomalous Blood Viscosity on Resistance to Flow in the Dog’s Hind Limb

Matthew N. Levy 533
Peripheral Venoconstriction During Acceleration and Orthostasis

Edwin W. Salzman and Sidney D. Leverett, Jr. 540

Hypotension (Shock) in Dogs Produced by *Escherichia Coli* Endotoxin

Lloyd D. MacLean and Max H. Weil 546

Extrarenal Effects of Intravenous Pitressin in Nephrectomized Rats

Sydney M. Friedman, Miyoshi Nakashima and Constance L. Friedman 557

Absence of Vasmotor Responses to Epinephrine and Arterenol in an Isolated Intracranial Circulation

Harold D. Green and Adam B. Denison 565

Pressure Events of the Cardiac Cycle in the Dog: Normal Right and Left Heart

Howard L. Moscovitz and Robert J. Wilder 574

Effects of Fat on Blood Viscosity in Dogs

Roy L. Swank 579

In Vitro Study of Cholesterol Metabolism in the Calf Aorta

Nicholas T. Werthessen, Melvin A. Nyman, Russell L. Holman and Jack P. Strong 586

Effect of Hypothermia in Irreversible Hemorrhagic Shock

Allen H. Postel, L. Corsan Reid and J. William Hinton 594

The Image Tetrahedron in Man Determined by Reciprocal Stimulation of a Tridimensional Esophageal Electrode

Jacob I. Hersch, Stanley A. Briller and Charles E. Kossmann 599

Increased Aldosterone Secretion in Response to Blood Loss

Gordon L. Farrell, Robert S. Rosnagle and Elizabeth W. Rauschbolb 606

Plasma Hypertensinase in Experimental Renal Hypertension

Concetta D. Harakal and Dean A. Collins 612

Metabolic Aspects of the Relationship Between the Contractility and Membrane Potentials of the Rat Atrium

J. Leyden Webb and Philip B. Hollander 618

A Catheter Tip Method for Measurement of the Instantaneous Aortic Blood Velocity

Donald L. Fry, Alexander J. Mallos and Alfred G. T. Casper 627

American Heart Association

Contributors to this Issue

No. 6

Editorial

Trends of Cardiovascular Research in Argentina

Eduardo Braun-Menendez 645

The Catechol Amine Content of Various Organs of the Cat After Injections and Infusions of Adrenalin and Noradrenalin

U. S. von Euler 647

Adrenergic Drugs and Blockade on Coronary Arterioles and Myocardial Contraction

Adam B. Denison, Suthip Bardhanabaedya and Harold D. Green 653

Effect of Elevation of Intraluminal Pressure on Renal Vascular Resistance

Francis J. Haddy 659

Specific Resistance of Body Tissues

Herman P. Schwan and Calvin F. Kay 664

The Electrolytes of Arterial Wall in Experimental Renal Hypertension

Louis Tobian 671

Role of Abdominal Aortic Branches in Pulse Wave Contour Genesis

Joseph M. Ryan, Ralph W. Stacy and Robert N. Watman 676

Lidocaine in Cardiac Resuscitation from Ventricular Fibrillation

Norman L. Carden and John E. Steinhaus 680

Left Ventricular Dimensions Recorded by Sonocardiometry

Robert F. Rushmer, Dean L. Franklin and Richard M. Ellis 684

Fractionation of the Cardiac Output of Rats with Isotopic Potassium

Leo A. Sapirstein 689

Splanchnic Hemodynamics and Oxygen Utilization During Hemorrhagic Shock in the Dog

Ewald E. Selkurt and Gerhard A. Brecher 693

Effect of Sympathomimetic Drugs in Acute Experimental Cardiac Tamponade

John T. Binning, William J. Morgan, Jr., George H. Welch and Stanley J. Sarnoff 705
Reactive Hyperemia in the Human Finger

Dali J. Patel and Alan C. Burton 710

Influence of Experimental Myocardial Infarction on Free Amino Acids of Dog Heart

Martin Chanin, Eugene Roberts and Alfred Goldman 713


Joseph H. Trapold 718

Ventricular Suction in the Turtle

James C. Kroner and Eric Ogden 724

Ineffectiveness of Nitroglycerin as an Antiadrenergic Agent on the Cat Heart

Nicholas R. Popovich, Fred F. Roberts, Rodney L. Crislip and Hermann Menges, Jr. 727

A Theoretical Analysis of Intracavitary Blood Mass Influence on the Heart-Lead Relationship

Daniel A. Brody 731

Books Reviewed and Received

739

American Heart Association

740

Contributors to this Issue

743