

Contents

Foreword	5
The Fine Structure and Contractile Mechanism of Heart Muscle, by David Spiro, M.D., Ph.D.	13
The Function of the Cell Membrane, by Dr. R. D. Keynes	63
Transmembrane Potentials of Cardiac Cells and Their Ionic Basis, by Donald H. Singer, Ralph Lazzara, and Brian F. Hoffman	73
Energy Sources in Ionic Movements, by Daniel C. Tosteson, M.D.	111
The Role of Ca in the Regulation of Muscle Activity, by Annemarie Weber	131
Thermochemical Aspects of Muscle Contraction, by Frances D. Carlson, Ph.D.	145
The Role of ATP in Contraction, by R. E. Davies	157
The Mechanics of Myocardial Contraction, by Edmund H. Sonnenblick, M.D.	173
The Possible Mode of Action of Antiarrhythmic Agents, by Brian F. Hoffman, M.D.	251
Some Considerations of Quinidine and Procaine Amide Action at the Cellular Level, by Hadley L. Conn, Jr., M.D.	269
The Mechanism of Action of Cardiac Glycosides, by W. Wilbrandt	297
Some Biochemical Reactions Influenced by the Digitalis Glycosides, by Robert J. Luchi, M.D.	309
Neurohumoral Agents—A Pharmacological Analysis of the Actions of Catecholamines upon the Heart, by Neil C. Moran, M.D.	331
Agents Modifying Myocardial Blood Flow, by Robert M. Berne, M.D.	355

The Myocardial Cell
Structure, Function, and
Modification by Cardiac Drugs

