

Contents

Introduction	V
Biological adaptation of the myocardium to a permanent change in loading conditions Swynghedauw, B.	I
Role of protein kinase system in the signal transduction of stretch-mediated myocyte growth Yazaki, Y., I. Komuro.	11
Sympathetic modulation of the cardiac myocyte phenotype: studies with a cell-culture model of myocardial hypertrophy Long, C.S., K. Kariya, L. Karns, P.C. Simpson	19
Growth factors, growth factor response elements, and the cardiac phenotype Schneider, M.D., W.R. McLellan, F.M. Black, T.G. Parker.	33
Signaling mechanisms for the activation of an embryonic gene program during the hypertrophy of cardiac ventricular muscle Chien, R.	49
Endothelial modulation of myocardial contraction: mechanisms and potential relevance in cardiac disease Shah, A.M., M.J. Lewis	59
The regulation of calcium cycling in stressed hearts Alpert, N.R., M. Periasamy, M. Arai, H. Matsui, L.A. Mulieri, G. Hasenfuss	71
Energetics of calcium cycling in nonfailing and failing human myocardium Hasenfuss, G., L.A. Mulieri, C. Holubarsch, B. Pieske, H. Just, N. R. Alpert	81
Spontaneous sarcoplasmic reticulum Ca^{2+} release leads to heterogeneity of contractile and electrical properties of the heart Lakatta, E.G., A. Talo, M.C. Capogrossi, H.A. Spurgeon, M.D. Stern	93
Afterdepolarizations and triggered activity Fozzard, H.A.	105

The contribution of nonreentrant mechanisms to malignant ventricular arrhythmias Pogwizd, S.M., B. Corr	115
The potential role of Ca^{2+} for electrical cell-to-cell uncoupling and conduction block in myocardial tissue Kléber, G.	131
Failure of myocardial inactivation: a clinical assessment in the hypertrophied heart Paulus, W.J., M.A. Goethals, S.U. Sys	145
Diastolic dysfunction in pressure-overload hypertrophy and its modification by angiotensin II: current concepts Lorell, B.H.	163
Mechanisms of cardiac growth. The role of the renin-angiotensin system Fernandez-Alfonso, M.S., D. Ganten, M. Paul	173
Cardiac fibroblasts: function, regulation of gene expression, and phenotypic modulation Eghbali, M.	183
Modulation of myocardial sarcoplasmic reticulum Ca^{++}-ATPase in cardiac hypertrophy by angiotensin converting enzyme? Holtz, J., R. Studer, H. Reinecke, H. Just, H. Drexler	191
Subject index	205