This book is compiled from the proceedings of a symposium by the Physiological Society of Philadelphia in 1984. From the introduction I cite the following description of its contents:

‘We did not try to put together an up-to-the-moment state-of-the-art review. Instead, it was our goal to integrate new information into the existing conceptual basis of our understanding of how blood vessels become diseased, and what might be done once the disease process has established itself. The book is divided into three major sections:

Section I deals with problems associated with the role of lipids in vascular function and includes information on the development and regression of atherosclerosis and pharmacological approaches to lowering blood lipid levels. In addition, the use of transluminal angioplasty in restoring blood flow in plaque-occluded vessels is reviewed along with the short- and long-term impact of this procedure on arterial wall function. Included in this section are in-depth discussions of the role of various lipids in arterial smooth muscle function, apart from their role in the genesis of atherosclerosis. The effects of cholesterol enrichment on cell membranes and smooth muscle contractility is presented along with discussions on the role of membrane phosphatidylinositol metabolism in excitation-contraction coupling, as well as calcium binding to smooth muscle cell membrane phospholipids. In addition, a potential role for platelet-activating factor (AGEC or PAF) in circulatory hemodynamics is presented.

Section II addresses the mechanistic basis of smooth muscle function and how it might be altered in hypertension. The role of calcium in excitation-contraction coupling in normal smooth muscle as well as calcium interactions with smooth muscle membranes in hypertension is developed. Chapters presenting biochemical and physiologic approaches taken to help clarify our constriction in normal and hypertensive arteries are also reviewed. In addition, electrophysiological alterations associated with hypertension are described as are alterations in calcium-dependent ion fluxes across the smooth muscle membranes. Lastly, the use of and directions for new research for antihypertensive drug therapy are presented, including a review of calcium antagonists and their mechanism of actions.’

The book appeared in 1986. One may ask whether a compilation of symposium contributions will stand the test of time, no matter how excellent individual contributions might be. I tend to answer this question negatively. In my opinion a book like this can only interest a small audience of those immediately and intimately involved in the subjects treated, but to these people it will quickly tend to appear outdated.
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