River Publishers

Basic Cardiovascular Physiology

From Molecules to Translational Medical Science

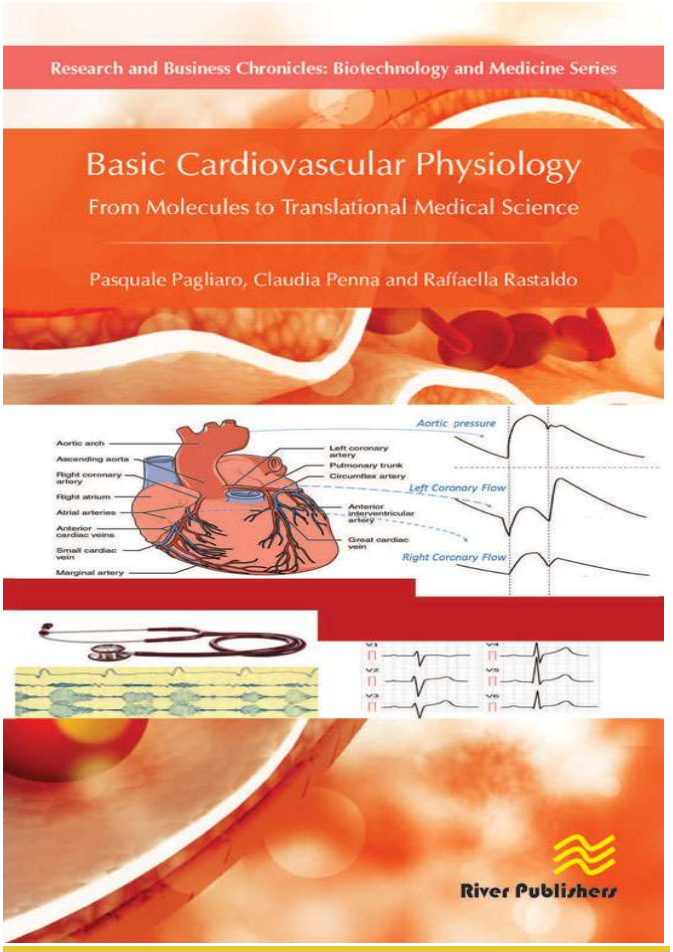
Authors:

Pasquale Pagliaro, University of Turin, Italy, and National Institute for Cardiovascular Research (INRC), Italy

Claudia Penna, University of Turin, Italy, and National Institute for Cardiovascular Research (INRC), Italy

Raffaella Rastaldo, University of Turin, Italy

This book focuses on established cardiovascular principles and highlights some of the progress achieved by recent research in the cardiovascular field. The authors report the basic concepts related to the functioning of the cardiovascular system necessary for medical students to understand. To foster learning, in each chapter the fundamental points are highlighted in italics and/or bold. In addition, we have added boxes that contain some more detailed information about physiological mechanisms or clinical aspects are analyzed and described in greater detail. The book describes the structure and function of the heart and vascular system for the reader to understand how the cardiovascular system responds in both health and disease. The book conveys a unified vision of the function of the heart and the vascular system, explaining the complexity of the system that goes far beyond the integrated connection between preload, afterload and cardiac contractility. The endothelium covers the internal part of the whole cardiovascular system; therefore, endothelial physiology is treated in several chapters. Given the importance of coronary circulation in cardiac pathophysiology, this special circulation is described in detail and enriched with the most up-to-date information. Several paragraphs and boxes on clinical implications are dedicated to the principles of electrophysiology and the electrocardiogram. A space is also dedicated to myocardial ischemia/reperfusion injury and cardioprotective procedures. The book is written in a linear and simple language without compromising the scientific rigor of the various topics covered.



River Publishers Series in Biotechnology and Medical Research

ISBN: 9788770222006
e-ISBN: 9788770221993
Available From: July 2020
Price: € 95.00 $ 130.00

KEYWORDS:
Arrhythmias, Baroreceptors, Biology of Cardiomyocytes, Biology of Endothelial Cells, Biology of Vascular Smooth Muscle, Cardiac Cycle, Cardiac Output, Cardiovascular Pathophysiology, Cardiovascular Receptors, Cardiovascular Response to Stress, Chemoreceptors, Coronary Circulation, Cutaneous Circulation, Electrocardiogram, Flow, Functional Tissues of the Heart, Hemodynamics, Lymph, Pressure, Pulmonary Circulation, Renal Circulation, Resistance to Blood Flow, Solute and Fluid Exchange, Splanchnic Circulation, Stroke Volume, Sympathetic and Parasympathetic Systems.

www.riverpublishers.com
marketing@riverpublishers.com