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Note generali	Revised edition of: Cardiac electrophysiology : from cell to bedside / [edited by] Douglas P. Zipes and Jose Jalife. Sixth edition. [2014].
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Voltage-gated sodium channels and electrical excitability of the heart -- Voltage-gated calcium channels -- Voltage-gated potassium channels -- Structural and molecular bases of cardiac inward rectifier potassium channel function -- Mammalian calcium pumps in health and disease -- Structural and molecular bases of sarcoplasmic reticulum ion channel function -- Organellar ion channels and transporters -- Molecular organization, gating, and function of connexin-based gap junction channels and hemichannels -- Structure-function relations of heterotrimetric complexes of sodium channel [alpha]- and [beta]-subunits -- Regulation of cardiac calcium channels -- Inhibition of phosphoinositide 3-kinase and acquired long QT syndrome -- Structural determinants and biophysical properties of hERG1 channel gating -- Molecular regulation of cardiac inward rectifier potassium channels by pharmacological agents -- Cardiac stretch-activated channels and mechano-electric coupling --

Biophysical properties of gap junctions -- Excitation-contraction coupling -- Ion channel trafficking in the heart -- Microdomain interactions of macromolecular complexes and regulation of the sodium channel Nav 1.5 -- Fibroblast growth factor homologous factors modulate cardiac sodium and calcium channels -- Macromolecular complexes and cardiac potassium channels -- Reciprocity of cardiac sodium and potassium channels in the control of excitability and arrhythmias -- The intercalated disc : a molecular network that integrates electrical coupling, intercellular adhesion, and cell excitability -- Function and dysfunction of ion channel membrane trafficking and posttranslational modification -- Feedback mechanisms for cardiac-specific microRNAs and camp signaling in electrical remodeling -- Stem cell-derived sinoatrial-like cardiomyocytes as a novel pharmacological tool -- Gene therapy and biological pacing -- Cell-to-cell communication and impulse propagation -- Mechanisms of normal and dysfunctional sinoatrial nodal excitability and propagation -- Cell biology of the specialized cardiac conduction system -- Cardiac remodeling and regeneration -- Ionic mechanisms of atrial action potentials -- Global optimization approaches to generate dynamically robust electrophysiological models -- Calcium signaling in cardiomyocyte models with realistic geometries -- Theory of rotors and arrhythmias -- Computational approaches for accurate rotor localization in the human atria -- Modeling the aging heart -- Innervation of the sinoatrial node -- Mechanisms for altered autonomic and oxidant regulation of cardiac sodium currents -- Pulmonary vein ganglia and the neural regulation of the heart rate -- Neural activity and atrial tachyarrhythmias.
Sympathetic innervation and cardiac arrhythmias -- The molecular pathophysiology of atrial fibrillation -- Myofibroblasts, cytokines, and persistent atrial fibrillation -- Role of the autonomic nervous system in atrial fibrillation -- Rotors in human atrial fibrillation -- Body surface frequency-phase mapping of atrial fibrillation -- Panoramic mapping of atrial fibrillation from the body surface -- Mechanisms of human ventricular tachycardia and human ventricular fibrillation -- Genetics of atrial fibrillation -- Mechanisms in heritable sodium channel diseases -- Genetic, ionic, and cellular mechanisms underlying the j wave syndromes -- Inheritable potassium channel diseases -- Inheritable phenotypes associated with altered intracellular calcium regulation -- Pharmacological bases of antiarrhythmic therapy -- Pharmacogenomics of cardiac arrhythmias -- Gene therapy to treat cardiac arrhythmias -- Highly mature human iPSC-derived cardiomyocytes as models for cardiac electrophysiology and drug testing -- Cardiac repair with human pluripotent stem cell-derived cardiovascular cells and arrhythmia risk -- Assessment of the patient with a cardiac arrhythmia -- Differential diagnosis of narrow and wide complex tachycardias -- Electroanatomical mapping for arrhythmias -- Computed tomography for electrophysiology -- Computed tomography and magnetic resonance imaging for electrophysiology -- Intracardiac echocardiography for electrophysiology -- Exercise-induced arrhythmias -- Cardiac monitoring : short- and long-term recording -- Head-up tilt table testing -- Autonomic regulation and cardiac risk -- T-wave alternans -- Noninvasive electrocardiographic imaging of arrhythmogenic substrates and ventricular arrhythmias in patients -- Genetic testing -- Sinus node abnormalities -- Atrial tachycardia -- Atrial tachycardia in adults with congenital heart disease -- Typical and atypical atrial flutter : mapping and ablation -- Atrial fibrillation : mechanisms, clinical features, and management -- Preexcitation, atrioventricular reentry, and variants -- Electrophysiological

characteristics of atrioventricular nodal reentrant tachycardia : implications for the reentrant circuits -- Junctional tachycardia -- Premature ventricular complexes -- Outflow tract ventricular tachyarrhythmias : mechanisms, clinical features, and management -- Fascicular ventricular arrhythmias -- Bundle branch reentry tachycardia -- Ischemic heart disease -- Ventricular tachycardia in patients with dilated cardiomyopathy -- Ventricular arrhythmias in hypertrophic cardiomyopathy : sudden death, risk stratification, and prevention with implantable defibrillators -- Ventricular tachycardias in arrhythmogenic right ventricular dysplasia/cardiomyopathy -- Ventricular tachycardias in catecholaminergic cardiomyopathy (catecholaminergic polymorphic ventricular tachycardia) -- Ventricular arrhythmias in heart failure. Arrhythmias and conduction disturbances in noncompaction cardiomyopathy -- Ventricular arrhythmias in Takotsubo cardiomyopathy -- Brugada syndrome -- Long and short QT syndromes -- Andersen-Tawil syndrome -- Timothy syndrome -- J-wave syndromes -- Idiopathic ventricular fibrillation -- Sudden infant death syndrome -- Sudden cardiac death in adults -- Arrhythmia in neurological disease -- Drug-induced ventricular tachycardia -- Ventricular arrhythmias in congenital heart disease -- Syncope -- Postural orthostatic tachycardia syndrome -- Progressive conduction system disease -- Atrioventricular block -- Sex differences in arrhythmias -- Sudden cardiac deaths in athletes, including commotio cordis -- Arrhythmias in the pediatric population -- Sleep-disordered breathing and arrhythmias -- Ventricular assist devices and cardiac transplantation recipients -- Standard antiarrhythmic drugs -- Innovations in antiarrhythmic drug therapy -- Impact of nontraditional antiarrhythmic drugs on sudden cardiac death -- Prevention of stroke in atrial fibrillation : warfarin and new oral anticoagulants -- Implantable cardioverter defibrillators : technical aspects -- Implantable cardioverter defibrillator : clinical aspects -- Subcutaneous implantable cardioverter defibrillators -- Implantable pacemakers -- Use of QRS fusion complex analysis in cardiac resynchronization therapy -- Newer applications of cardiac pacemakers and extracardiac stimulation -- Remote monitoring of cardiac implantable electronic devices -- Catheter ablation : technical aspects -- Catheter ablation : clinical aspects -- Ablation for atrial fibrillation -- Ablation of supraventricular tachyarrhythmias -- Catheter ablation for ventricular tachycardia with or without structural heart disease -- Epicardial approach in electrophysiology -- Ventricular fibrillation -- Ablation in pediatrics -- Catheter ablation in congenital heart disease -- Anesthesiology considerations for the electrophysiology laboratory -- Surgery for atrial fibrillation and other supraventricular tachycardias -- Surgery for ventricular arrhythmias -- Vagus nerve stimulation for the treatment of heart failure -- Baroreceptor stimulation -- Spinal cord stimulation for heart failure and arrhythmias -- Renal sympathetic denervation -- Left atrial appendage closure.

Sommario/riassunto

"Rapid advancements in cardiac electrophysiology require today's health care scientists and practitioners to stay up to date with new information both at the bench and at the bedside. The fully revised 7th Edition of Cardiac Electrophysiology: From Cell to Bedside, by Drs. Douglas Zipes, Jose Jalife, and William Stevenson, provides the comprehensive, multidisciplinary coverage you need, including the underlying basic science and the latest clinical advances in the field"-- Publisher's description.