

ART I FOUNDATIONS OF CARDIOVASCULAR MEDICINE

- 1 Cardiovascular Disease: Past, Present, and Future
- 2 Global Burden of Cardiovascular Disease
- 3 Impact of Climate Change and the Environment on Cardiovascular Health
- 4 Clinical Trials in Cardiovascular Medicine
- 5 Clinical Decision-Making in Cardiology
- 6 Impact of Health Care Policy on Quality, Outcomes, and Equity in Cardiovascular Disease

PART II PERSONALIZED APPROACHES TO CARDIOVASCULAR DISEASE

- 7 Applications of Genetics to Cardiovascular Medicine
- 8 Principles of Drug Therapeutics, Pharmacogenomics, and Biologics
- 9 Biomarkers and Use in Precision Medicine
- 10 Artificial Intelligence in Cardiovascular Medicine

PART III EVALUATION OF THE PATIENT

- 11 History, Physical Examination, and the Virtual Visit
- 12 Electrocardiography
- 13 Exercise Physiology and Exercise Testing
- 14 Echocardiography
- 15 Chest Radiography in Cardiovascular Disease
- 16 Nuclear Cardiology
- 17 Cardiovascular Magnetic Resonance Imaging
- 18 Cardiac Computed Tomography
- 19 Coronary Angiography and Intravascular Imaging
- 20 Invasive Hemodynamic Diagnosis of Cardiac Disease
- 21 Anesthesia and Noncardiac Surgery in Patients With Heart Disease

PART IV PREVENTIVE CARDIOLOGY

- 22 The Vascular Biology of Atherosclerosis
- 23 Primary Prevention of Cardiovascular Disease
- 24 Systemic Hypertension: Mechanisms, Diagnosis, and Treatment
- 25 Lipoprotein Disorders and Cardiovascular Disease
- 26 Cardiovascular Effects of Tobacco and Nicotine Products
- 27 Nutrition and Cardiovascular and Metabolic Diseases
- 28 Obesity and Cardiovascular Health
- 29 Diabetes and the Cardiovascular System
- 30 Comprehensive Cardiac Rehabilitation
- 31 Integrative Approaches to the Management of Patients With Heart Disease

PART V ATHEROSCLEROTIC CARDIOVASCULAR DISEASE

- 32 Approach to the Patient With Chest Pain
- 33 Coronary Blood Flow and Myocardial Ischemia
- 34 ST-Elevation Myocardial Infarction Pathophysiology and Clinical Evolution
- 35 ST-Elevation Myocardial Infarction: Management
- 36 Non-ST Elevation Acute Coronary Syndromes
- 37 Stable Ischemic Heart Disease
- 38 Percutaneous Coronary Intervention
- 39 Diseases of the Aorta
- 40 Peripheral Artery Diseases

- 41 Treatment of Noncoronary Obstructive Vascular Disease
- 42 Prevention and Management of Ischemic Stroke

PART VI ARRHYTHMIAS, SUDDEN DEATH, AND SYNCOPE

- 43 Approach to the Patient With Cardiac Arrhythmias
- 44 Mechanisms of Cardiac Arrhythmias
- 45 Genetics of Cardiac Arrhythmias
- 46 Therapy for Cardiac Arrhythmias
- 47 Supraventricular Tachycardias
- 48 Atrial Fibrillation
- 49 Ventricular Arrhythmias
- 50 Bradyarrhythmias and Atrioventricular Block
- 51 Pacemakers, Conduction System Pacing, Cardiac Resynchronization Therapy, and Implantable Cardioverter-Defibrillators
- 52 Cardiac Arrest and Sudden Cardiac Death
- 53 Hypotension and Syncope

PART VII HEART FAILURE

- 54 Mechanisms of Cardiac Contraction and Relaxation
- 55 Pathophysiology of Heart Failure
- 56 Clinical Assessment of Heart Failure
- 57 Diagnosis and Management of Decompensated Heart Failure
- 58 Management of Heart Failure Patients With Reduced Ejection Fraction
- 59 Heart Failure With Preserved or Mildly Reduced Ejection Fraction
- 60 The Dilated, Restrictive, and Infiltrative Cardiomyopathies
- 61 Cardiac Amyloidosis
- 62 Hypertrophic Cardiomyopathy
- 63 Myocarditis
- 64 Cardio-Oncology
- 65 Devices for Monitoring and Managing Heart Failure
- 66 Mechanical Circulatory Support
- 67 Cardiac Transplantation

PART VIII DISEASES OF THE HEART VALVES

- 68 Aortic Valve Stenosis
- 69 Aortic Regurgitation
- 70 Transcatheter Aortic Valve Replacement
- 71 Mitral Stenosis
- 72 Mitral Regurgitation
- 73 Tricuspid, Pulmonic, and Multivalvular Disease
- 74 Transcatheter Therapies for Mitral and Tricuspid Valvular Heart Disease
- 75 Prosthetic Heart Valves
- 76 Infective Endocarditis
- 77 Rheumatic Fever

PART IX DISEASES OF THE PERICARDIUM AND PULMONARY VASCULAR BED

- 78 Pericardial Diseases
- 79 Pulmonary Embolism and Deep Vein Thrombosis
- 80 Pulmonary Hypertension
- 81 Sleep-Disordered Breathing and Cardiac Disease

PART X CARDIOVASCULAR DISEASE IN SELECT POPULATIONS

- 82 Endemic and Pandemic Viral Illnesses and Cardiovascular Disease: Influenza and COVID-19
- 83 Cardiovascular Abnormalities in HIV-Infected Individuals
- 84 Exercise and Sports Cardiology
- 85 Cardiovascular Disease in Women
- 86 Pregnancy and Heart Disease
- 87 Congenital Heart Disease in the Adolescent and Adult
- 88 Heart Disease in Various Populations
- 89 Cardiovascular Disease in Older Adults
- 90 Cardiovascular Effects of Drugs and Toxins

PART XI CARDIOVASCULAR DISEASE AND DISORDERS OF OTHER SYSTEMS

- 91 Hemostasis, Thrombosis, Fibrinolysis, and Cardiovascular Disease
- 92 Endocrine Disorders and Cardiovascular Disease
- 93 Rheumatic Diseases and the Cardiovascular System
- 94 Tumors Affecting the Cardiovascular System
- 95 Psychiatric and Psychosocial Aspects of Cardiovascular Disease
- 96 Neuromuscular Disorders and Cardiovascular Disease
- 97 Interface Between Kidney, Metabolic, and Cardiovascular Diseases
- 98 Cardiovascular Manifestations of Autonomic Disorders