

## Advanced Heart Failure And Transplant Cardiology Programs

*Whether you or a relative are undergoing an organ transplant or considering or planning the surgery, this book offers help. 100 Questions & Answers About Liver, Heart, and Kidney Transplantation: A Lahey Clinic Guide gives authoritative, practical answers to your questions about organ transplants. This comprehensive guide provides sources of support from both the doctor's and patient's viewpoints. An invaluable resource for anyone coping with the physical and emotional turmoil of an organ transplant! This work provides a one-of-a-kind volume that includes all aspects of heart transplantation from its historic beginning to its current day standards which now make the procedure a long-term treatment option for heart failure patients. The subjects covered include technical aspects of the procurement and implant procedures, as well as the medical nuances of pre-operative preparation and post-transplant immunosuppression management; the current day multi-disciplinary make up of the transplant team along with information on the keys to building and running a successful transplant program; regulatory standards and listing policies and the impact of the growing mechanical circulatory support technologies on the transplant field; and emerging technologies and future possibilities. All chapters are written by experts in the field and include the most up-to-date peer reviewed studies and clinical guidelines. This book gives an ever-changing reference that will become the text of choice for those beginning or continuing their transplant careers. The treatment of end-stage heart failure with advanced surgical therapies has evolved significantly over the last several years and is a dynamic subspecialty within cardiac surgery. Surgical Treatment for Advanced Heart Failure describes the surgical management of advanced heart failure, including coronary artery revascularization, mitral valve repair, aortic valve replacement, ventricular remodeling, cardiac resynchronization, mechanical circulatory support with short-term devices for acute stabilization, long-term mechanical support as a bridge to transplant and for destination therapy, left ventricular assist devices, complete cardiac replacement with the total artificial heart, and cardiac transplantation. With contributions from a distinguished group of heart failure cardiologists and transplant surgeons, it is an authoritative resource for cardiac surgeons, cardiologists, and surgeons.*

*Recognized heart failure expert Brian Jaski, MD, takes the reader through the spectrum of diagnosis and treatment of each of the four stages of heart failure, and reviews important functional classifications of heart failure and individual therapies. A very visual book that is more than the guidelines.*

*Mechanical Circulatory Support*

*Heart Failure in Adult Congenital Heart Disease*

*Heart Failure in the Child and Young Adult*

*Mechanical Circulatory Support: A Companion to Braunwald's Heart Disease Ebook*

*100 Questions & Answers About Liver, Heart, and Kidney Transplantation: Lahey Clinic*

*Heart Failure in the Child and Young Adult: From Bench to Bedside combines multiple etiologies for pediatric heart failure, including congenital heart disease, cardiomyopathies, infectious diseases and metabolic abnormalities. This comprehensive resource combines research from multiple contributors with current guidelines to bridge the knowledge gap for the recognition and management of heart failure in children. Coverage begins with the basic science of heart failure, then progresses through diagnosis, management, treatment and surgery, finally concluding with advanced special topics, including genetics, self-management and nanomedicine. Provides coverage of the basic science of heart failure, its epidemiology and economic aspects, outpatient and inpatient management, and advanced therapies, including mechanical circulatory support and heart transplantation Combines cutting-edge research with current guidelines from the field*

*This concise practical guide is designed to facilitate the clinical decision-making process by reviewing a number of cases and defining the various diagnostic and management decisions open to clinicians. It is well illustrated and diverse in scope, enabling the reader to obtain relevant clinical information regarding both standard and unusual cases in heart failure in a rapid, easy to digest format. Clinical cases are a key component in modern medical education, assisting the trainee or recertifying clinician to work through unusual cases using best practice techniques. Cardiology is a key discipline in this regard and is a highly visual subject requiring the reader to describe often very subtle differences in the presentation of patients and define accurately the diagnostic and management criteria on which to base their clinical decision-making. This title therefore provides valuable assistance to trainees and clinicians alike in evaluating patients and defining an appropriate procedure for each case covered.*

*Heart failure is epidemic throughout the world. A growing incidence and prevalence has resulted in a large population of individuals transitioning to advanced stages of the syndrome and requiring uniquely specialised therapies and cardiac transplantation. i The Oxford Textbook of Advanced Heart Failure and Cardiac Transplantationr is a focused and comprehensive work covering this new and rapidly growing cardiovascular subspecialty. Authored by eminent international experts, it is the authoritative text on advanced heart failure and a central resource for clinicians caring for patients with this condition. By covering a range of characteristics, therapeutic challenges and practical aspects of managing patients, this book provides an in-depth source for cardiologists and other related clinicians. A strong focus on the difficult decision making needed to handle advanced heart failure cases, along with specific knowledge of epidemiology, biology and pathophysiology, creates a key tool for optimally managing these complex patients.*

*Emergency medicine textbook on identifying and treating cardiac emergencies, includes interpretation of ECGs, use of ultrasound in diagnosis, identification of arrhythmias, shock, syncope, post-arrest syndrome and much more.*

*Blood and Marrow Transplantation Long Term Management*

*Oxford Textbook of Heart Failure*

*Clinical, Pathology, Imaging and Molecular Profiles*

*Cardiac Transplantation*

*A Comprehensive Guide to Pathophysiology and Clinical Care*

This engaging book provides a state-of-the-art introduction to the rapidly evolving field of mechanical circulatory support therapy in the care of patients with advanced heart failure. It is aimed at healthcare teams around the world who are involved in patient care, research, and teaching of advanced heart failure; healthcare professionals in training; and interested lay persons. In particular, this book. ? serves as a comprehensive resource and practice guide on all aspects of mechanical circulatory support therapy, starting with an overview on heart failure management and then continuing with the referral and evaluation, the care before and after mechanical circulatory support implantation, the analysis of outcomes and complications, as well as a description of research and societal perspectives in the field of mechanical circulatory support therapy;. ? is founded on the expertise of Columbia University Medical Center (New York City), which has one of the most renowned heart failure, mechanical circulatory support, and heart transplantation programs in the world;. ? takes a multidisciplinary integrated healthcare team approach, including the perspectives of cardiologists, cardiac surgeons, nurses, coordinators, social workers, psychologists, physical therapists, financial experts, and bioethicists; and. ? provides in a unique way the complementary viewpoints from the expert healthcare team's as well as the patient's and family's perspectives, with patient vignettes interspersed throughout the entire text.

This book will provide a unique approach to cardiovascular genetics and genomics through utilizing clinical cases to illustrate the basic science concepts as the practitioner will encounter them in regular clinical practice. Through the teaching value of real-world case discussions, the principles of cardiovascular genetics and genomics can be illustrated clearly and memorably, and the clinician will be able to relate the cases shown in the book with those seen in direct experience. The book opens with a "primer" of the basic scientific concepts, providing the reader with a clear, easy to understand "toolkit" for the discussions of the genetic science in clinical practice.

There is an evident practice gap in education of general adult cardiologists on long-term management of congenital heart disease (CHD). The goal of this book is to help general cardiologists, but also pediatricians and related care providers in the management and diagnosis of adult CHD. Adult Congenital Heart Disease in Clinical Practice provides clear, practical advice on adult CHD for the busy fellow, resident and practicing clinician. It includes training and revision material to assist learning and is formatted in such a way as to provide short, concise content designed for easy recall of salient facts.

This book is a comprehensive overview of heart failure and cardiac transplantation and integrates scientific and clinical information about the physiology, pathophysiology, diagnosis, and treatment of this disorder. Organized into five parts, it reviews the history and basic mechanisms of heart failure; etiology of heart failure; heart failure disease progression; advanced therapies for heart failure; and cardiac transplantation. The book presents basic concepts in the physiology, molecular biology, pathology, and epidemiology of the normal and failing heart; known causes of heart failure, such as right heart failure, valvular cardiomyopathy, molecular mechanisms of sarcomeric cardiomyopathies, and neuromuscular cardiomyopathy; cardiorenal syndrome; neurohormonal activation; cardiac resynchronization, ventricular assist devices; regenerative mechanisms; orthotopic heart transplantation; early and late management of the post-transplant patient; heart transplantation and antibody-mediated rejections; heart-lung transplantation; and cardiac xenotransplantation. Featuring contributions from leaders in the fields of heart failure, cardiac transplantation, cardiac pathology, and cardiovascular molecular research, Congestive Heart Failure and Cardiac Transplantation is a valuable compendium for cardiologists, cardiothoracic surgeons, researchers, trainees, and students.

Cardiac Allograft Rejection

Myocardial Biology

Congestive Heart Failure and Cardiac Transplantation

A Texas Heart Institute/Baylor College of Medicine Approach

*This book is a detailed practical guide to the use of ventricular assist devices and total artificial hearts to provide mechanical circulatory support (MCS) in patients with end-stage heart failure. It explains why MCS may be indicated, which patients require MCS, when and how to implant ventricular assist devices or a total artificial heart, and how to avoid potential complications of MCS. Management throughout the period of care is described, from preimplantation to follow-up, and both typical and atypical cases are discussed. The text features numerous helpful tips and tricks relating to surgical and nonsurgical management and is supported by a wealth of high-quality illustrations that document the preoperative evaluation and implantation techniques. Heart transplantation remains the gold standard for the treatment of patients suffering from end-stage heart failure, but the shortage of donors has led to an increase in the use of MCS. This book will assist all physicians, and especially cardiologists and anesthesiologists, who are involved in the care of these patients.*

*This comprehensively covers everything from pathophysiology to the evaluation of patients presenting with heart failure to medical management, device therapy, heart transplantation and mechanical circulatory support, and include relevant cardiac imaging studies such as echocardiograms and magnetic resonance imaging studies which could be seen in their entirety as well as pathology slides, hemodynamic tracings and videos of cardiac surgery such as heart transplants and ventricular assist device implantation. Finally, the book would have videos of patients with heart failure, heart transplants or ventricular assist devices, describing their clinical presentation and experiences. It is structured so that it can be used as a guide by physicians studying for the general Cardiology or Advanced Heart Failure and Cardiac Transplantations Boards.*

*This is a concise review of up-to-date concepts and techniques in the discipline of heart transplantation. It is a review and reference for practitioners managing patients with advanced heart disease, including patients with end-stage heart failure, mechanical circulatory support or transplant recipients. Heart failure is a major public health issue, with a prevalence of over 5.8 million in the USA, and over 23 million worldwide, and rising. The lifetime risk of developing heart failure is one in five. Heart failure carries substantial morbidity and mortality, with 5-year mortality that rival those of many cancers. As heart transplantation remains the best treatment option for patients with end stage heart failure, this primer will provide valuable information and management strategies for physicians caring for these patients. Also, due to continued shortage in donor organs, heart transplantation is a limited resource – which further underscores the importance of appropriately evaluating patients for transplant candidacy and managing their pre, peri- and post-transplant care for maximum benefit and best outcomes.*

*Written by internationally renowned leaders in their field and relevant to all practicing clinicians, this textbook comprehensively covers all aspects of heart failure, and suggests the optimal evidence-based management for heart failure patients.*

*Heart Transplantation*

*Volume 2: Surgical*

*The 4 Stages of Heart Failure*

*Drug & Device Selection in Heart Failure*

*Clinical Guide to Heart Transplantation*

Written by one of the country's leading experts on Heart Failure, this completely new book provides a personalized approach, information and advice, guiding you and your family towards getting optimal heart failure care. Heart failure still affects over 6 million Americans, fill our hospitals and consumes enormous healthcare resources in the US and worldwide. Much of the impact of heart failure is lack of process and coordination of care with patients firmly inserted as team members. Dr. Silver says, "Strategic Heart Failure is a distillation of how my team and I helped patients and improved their outcomes for almost 4 decades. I want to share this approach directly with patients; they can help lead their healthcare, understand how decisions are made and improve the entire process of heart failure care." Understanding of a few fundamentals of heart failure care, especially the metrics and language that guideline directed care is crafted from, patients and families can not only join their care team but become the CEO! This Strategic approach moves people with heart failure from patients to partner within a caring, coordinated and engaged teams. Four prior editions of his books, Success with Heart Failure, elevated the understanding of the heart failure syndrome among thousands worldwide. His motivation for Strategic Heart Failure was his realization that his work on clinical trials, research, training other men and women professionals, serving on national guideline committees, being an Editor- in-Chief of a heart failure journal and even being one of the first Board Certified Fellows in Advanced Heart Failure and Transplant was not enough.

Even having one of the finest and most dedicated teams was not enough. It is critical for: The patient to be involved The patient to be the team leader The patient to speak the "Heart Failure" language and understand the rationale and process for every life impacting decision Included is: Where to start even before deciding on drugs and devices? Who should be on your team? What is the Patient Profile and why it is essential for all team members to use? What are the various classifications of heart failure and why it matters? What does HFrEF, HFpEF and HFmEF mean and why does it matter? Why the majority of patients with or at risk for heart failure may not know of their risk? How to use published heart failure guidelines? What other chronic diseases commonly overlap with heart failure? What are biomarkers and how should they be used? And much, much more...including information on COVID-19, SGLT2 inhibiting drugs, lifesaving medicines including ARNIs, and technologies you may not be aware of such as blood volume analysis. And the truth is that Strategic Heart Failure is an approach that is of value to anyone with heart failure but also can be applied to any other chronic disease. So, let's get Strategic!

This book is a concise, portable handbook that focuses on the clinical use of mechanical blood pumps. All aspects of mechanical circulatory support are addressed, including patient selection, preoperative preparation, operative management, anesthetic considerations and conduct of cardiopulmonary bypass, postop management including complications associated with blood pump use and long-term care and rehabilitation.

Heart failure is epidemic throughout the world. A growing incidence and prevalence has resulted in a large population of individuals transitioning to advanced stages of the syndrome and requiring uniquely specialised therapies and cardiac transplantation. Oxford Textbook of Advanced Heart Failure and Cardiac Transplantation is a focused and comprehensive work covering this new and rapidly growing cardiovascular subspecialty. Authored by eminent international experts, it is the authoritative text on advanced heart failure and a central resource for clinicians caring for patients with this condition. By covering a range of characteristics, therapeutic challenges and practical aspects of managing patients this book provides an in-depth source for cardiologists and other related clinicians. A strong focus on the difficult decision making needed to handle advanced heart failure cases, along with specific knowledge of epidemiology, biology and pathophysiology, creates a key tool for optimally managing these complex patients.

Offering comprehensive, authoritative coverage of mechanical circulatory support (MCS), this fully revised companion to Braunwald's Heart Disease provides the clinically relevant information you need to effectively use this therapy to treat and manage end-stage heart failure. New editors and authors – experts in both cardiology and cardiovascular surgery – bring you fully up to date with the newest technology and devices, as well as basic science, clinical applications, adverse event monitoring and management, socioeconomic implications, future directions, and more. Covers all of the newest techniques, including new-generation devices. Discusses the management of common patient problems, highlighting cautions and outcomes, as well as pathophysiology and rationale for treatment. Brings you up to speed with the latest coverage of ventricular assist devices (VAD), extracorporeal membrane oxygenation (ECMO), next-generation centrifugal pumps, and total artificial hearts. Provides a complete clinical perspective of the latest scientific breakthroughs and analysis of the current literature. Includes coverage of the most recent guidelines and protocols, including MCS for pediatric and congenital heart disease: the Interagency Registry of Mechanically Assisted Circulatory Support (INTERMACS) as a tool to track and advance clinical practice; and cellular, molecular, genomic, and functional changes that occur in the failing heart in response to MCS. Presents practical evidence from the registry of thousands of cases to guide cardiologists, cardiovascular surgeons, emergency physicians, primary care physicians, and other team members on the best management course to follow for each particular patient.

A Problem Solving Approach

Mechanical Circulatory Support in End-Stage Heart Failure

Adult Congenital Heart Disease in Clinical Practice

Heart Failure

Mechanical Circulatory Support for Advanced Heart Failure

**Each year over 400,000 people have a new onset of heart failure in the United States, adding to a current patient population of over 4.8 million Americans. Basics of Heart Failure takes a problem-solving approach to examining heart failure and to providing the reader with an up-to-date account of our knowledge in this area. Chapters on the diagnosis and therapy of heart failure emphasize data from recent multicenter trials.**

**In an increasingly global community, the rapid adaptation of microorganisms has facilitated the return of old communicable diseases and the emergence of new ones. Tropical Dermatology, 2nd Edition, provides a practical, highly illustrated approach to the diagnosis and treatment of a wide range of tropical skin diseases. In a concise and user-friendly format, it offers authoritative coverage of epidemiology, diagnosis, differential diagnosis, pathology, laboratory tests, management, and prevention for both common and rare conditions. Examines the full range of tropical skin diseases in an easy-to-reference format, with consistently organized, templated chapters. Structures clinical guidance by disease rather than by microbe or "bug." Covers the key issues for travelers, important considerations for people working in the tropics, and non-infectious conditions. Provides authoritative guidance for dermatologists, infectious disease specialists, and travel medicine physicians. Includes new chapters on Tungiasis, Ebola and Zika virus. Features updates on emerging diseases and new therapies throughout. Includes brand-new, "hard-to-find" clinical images, for a total of more than 650 full-color illustrations throughout. Integrates the knowledge and experience of new international contributors, including recognized experts in dermatology from the United States, Europe, South America, Africa, and Asia.**

**This book sheds new light on the diagnosis and treatment of Heart Failure in adult patients with congenital heart disease. This is a rapidly growing clinical issue for this group of patients and the clinical teams caring for them. The book highlights the major clinical dilemmas in diagnosing heart failure in patients with a lifelong cardiac condition and describes in details the utility of biomarkers, complex imaging and functional tests, e.g. the cardiopulmonary exercise testing. A step-wise approach to treatment is described from drug therapy through to devices and transplantation. As such, the book offers an essential guide for cardiologists and cardiac surgeons looking to optimize the management of patients with delicate physiology and complex disease.**

**Oxford Textbook of Advanced Heart Failure and Cardiac TransplantationOxford University Press**

**Clinical Cases in Heart Failure**

**Surgical Treatment for Advanced Heart Failure**

**Advanced Heart Failure, An Issue of Heart Failure Clinics, E-Book**

**Pediatric Heart Failure**

**Energy Metabolism in Heart Failure**

Hematopoietic cell transplantation (HCT) provides curative therapy for a variety of diseases. Over the past several decades, significant advances have been made in the field of HCT, to the point where HCT has become an integral part of treatment modality for a variety of hematologic malignancies and some nonmalignant diseases. HCT remains an important treatment option for a wide variety of hematologic and nonhematologic disorders, despite recent advances in the field of immunologic therapies. Factors driving this growth include expanded disease indications, greater donor options (expanding unrelated donor registries and haploidentical HCT), and accommodation of older and less fit recipients. The development of less toxic pretransplant conditioning regimens, more effective prophylaxis of graft-versus-host disease (GVHD), improved infection control, and other advances in transplant technology have resulted in a rapidly growing number of transplant recipients surviving long-term free of the disease for which they were transplanted. The changes over decades in the transplant recipient population and in the practice of HCT will have almost inevitably altered the composition of the long-term survivor population over time. Apart from an increasingly older transplant recipient cohort, the pattern of transplant indications has shifted from the 1990s when chronic myeloid leukemia made up a significant proportion of allo-HCT indications. Changes in cell source, donor types, conditioning regimens, GVHD prophylaxis, and supportive care have all occurred, with ongoing reductions in both

relapse and non-relapse mortality (NRM) have been demonstrated. These patients have increased risks for a variety of late complications, which can cause morbidity and mortality. Most long-term survivors return to the care of their local hematologists/oncologists or primary care physicians, who may not be familiar with specialized monitoring and management of long complications after HCT for this patient population. As HCT survivorship increases, the focus of care has shifted to the identification and treatment of long-term complications that may affect quality of life and long-term morbidity and mortality. Preventive care as well as early detection and treatments are important aspects to reducing morbidity and mortality in long-term survivors after allo-HCT. This second edition, *Blood and Marrow Transplantation Long-Term Management: Survivorship after Transplant*, provides up-to-date information about diagnosis, screening, treatment, and long-term surveillance of long-term survivors after HCT.

Over the past ten years, cardiac transplantation has evolved from an experimental procedure performed in a handful of university centers to a viable therapeutic modality now performed in more than 150 centers worldwide. The complexity of the procedure, the changing immunosuppressive regimens, and the follow-up care have necessitated a multidisciplinary approach involving a variety of medical, nursing, and social sciences specialties. In addition, health care trainees and referring physicians are increasingly becoming involved in the care of the cardiac transplant recipient. This book does not attempt to be a comprehensive treatise on cardiac transplantation; rather, we hope that it will serve as a manual and guideline for all health professionals involved in cardiac transplantation. JEFFREY D. HOSENPUJ, M.D. Contents Preface v Contributors IX 1. Cardiac Transplantation: An Overview JEFFREY D. HOSENPUJ AND ALBERT STARR Immunogenetics and Immunologic Mechanisms of 2. Rejection 15 DOUGLAS J. NORMAN 3. Medical Therapy Tailored for Advanced Heart Failure 33 LYNNE WARNER STEVENSON 4. Ventricular Assistance as a Bridge to Cardiac Transplantation 53 D. GLENN PENNINGTON AND MARC T. SWARTZ Recipient Selection for Cardiac Transplantation 71 5. GEORGE A. PANTELY 6. Donor Selection and Management for Cardiac Transplantation 85 JEFFREY SWANSON AND ADNAN COBANOGU 7. Operative Techniques and Early Postoperative Care in Cardiac Transplantation 95 ADNAN COBANOGU Endomyocardial Biopsy: Techniques and Interpretation of 8.

This book focuses on how ventricular assist devices (VADs) can help provide destination therapy for patients with terminal heart failure, one of the most serious diseases in the world today because of the tremendous number of patients, the high mortality rate, and the cost of care. One means of providing cardiologic support for patients suffering from heart failure is with VADs, and more than 10,000 patients worldwide have now been implanted with these devices. Half of them already have lived more than one year, and 2,000 patients more than two years, after surgery. This improved survival means that we have reached a point where VADs can be used for destination therapy, not just for bridge-to-recovery or bridge-to-transplant. In view of the increasing number of patients with advanced-stage heart failure and the availability and longevity of transplanted hearts, VADs can solve many problems. In addition to providing information about the devices themselves, this book includes vital guidelines on long-term management and support of VAD-implanted patients' everyday lives.

Energy Metabolism in Heart Failure

A Manual for Health Care Professionals

Ventricular Assist Devices in Advanced-Stage Heart Failure

Tropical Dermatology E-Book

Basics of Heart Failure

From Bench to Bedside

This issue of the *Heart Failure Clinics*, edited by Drs. James Fang and Michael Givertz, is entitled "Advanced Heart Failure" and covers a wide array of topics relating to the subject. The issue will delve into the prevalence, history and prognosis of advanced heart failure; cardiorenal interactions; cardiohepatic interactions; the role of temporary mechanical circulatory support; guided therapy; the role of heart transplantation; palliative care; frailty; and novel biological techniques, among other topics.

Heart failure is an increasingly prevalent syndrome worldwide with a high impact on quality of life and survival. Although there have been great advances in the treatment of this condition that effectively increase survival, mortality remains unacceptably high, exceeding 40% at 5 years, which is worse than a large number of cancers. Furthermore, patients with advanced heart failure are a particular subgroup with higher hospitalizations and mortality, with a short-term survival that can be as low as 50% in the case of cardiogenic shock. Heart transplantation remains the gold standard treatment for these patients when other pharmacological and non-pharmacological interventions have failed, with a 1-year survival of approximately 90%. However, not all patients are suitable candidates for this procedure, and knowing the indications as well as the contraindications for heart transplantation is essential for appropriate patient selection. *Heart Transplantation: Indications, Postoperative Management and Long-Term Outcomes* is a highly illustrated, didactic book that comprehensively describes the pretransplant assessment of the advanced heart failure patient, the perioperative management of heart transplantation, and the early and late complications of the heart transplant recipient. It also covers special situations in heart transplantation such as Chagas cardiomyopathy, congenital heart disease, hypertrophic/restrictive cardiomyopathy and pediatric heart transplantation. This book is intended for cardiology fellows in training, surgeons, cardiologists, internists, and other health professionals involved in the care of heart transplant patients.

This textbook offers an up-to-date, user-friendly guide on the evaluation, diagnosis and treatment of heart failure. Each chapter is dedicated to providing comprehensive coverage of every aspect of heart failure from cardiac signs and symptoms through imaging and the genetic basis for disease to surgery, interventions, treatment and preventative cardiology. *Heart Failure* provides the trainee and practising cardiologist, cardiac surgeon, vascular surgeon, diabetologist, cardiac radiologist and any physician who manages cardiac patients with a valuable resource featuring extensive guidance on the diagnosis and management of a range of conditions related to heart failure.

James C. Fang, MD, and Gregory S. Couper, MD, have assembled a panel of prominent surgeons and cardiologists to review the latest clinical, scientific, and investigational surgical and mechanical approaches to heart failure in hopes of improving the lives of this challenging group of patients. Topics range from such traditional strategies as high-risk surgical revascularization in advanced coronary artery disease, to more novel approaches such as ventricular reconstruction and mechanical assist devices. Many chapters are contributed by the original pioneers of specific surgical techniques, which provide an invaluable perspective from personal experience.

Survivorship after Transplant

Sparkplug

Strategic Heart Failure

Heart Transplantation: Indications, Postoperative Management and Long-Term Outcomes

Management of Heart Failure

**The first book of its kind, this reference describes current diagnostic and treatment strategies for acute and chronic heart failure in the fetus, neonate, child, and young adult-encompassing every aspect of pediatric heart failure including historical perspectives, the latest technologies in mechanical circulatory support, and recent information on the psychosocial aspects of heart failure in children.**

**Provides review of the most recent advances in drugs and devices used for the treatment of heart failure, helping clinicians select the best evidence-based therapy for patients. Written by experienced cardiologists from San Francisco and Philadelphia.**

**This book provides the most up to date information on every aspect of clinical care relating to patients with advanced heart failure who require mechanical circulatory support as a treatment strategy.**

**The book begins with an extensive description of the preoperative patient selection process as well as preoperative medical optimization, including bridge to bridge strategies with short-term devices. The book then transitions into a description of a variety of surgical implantation techniques with special considerations for reoperative surgery. A chapter on intraoperative anesthesia management is specifically focused on intraoperative issues relating to MCS patients. Subsequent chapters focus on perioperative management as well as long-term management of patients on MCS, including optimization of a patient's LVAD speed. A dedicated chapter on the diagnosis of device thrombosis as well as surgical techniques and outcomes associated with device exchanges is also included. The book also summarizes the national and international outcomes data for using MCS as a bridge to transplant and destination therapy. There is also a chapter on the utility of stem cells as an adjunct technique for inducing myocardial recovery. Finally, the book has chapters on complications of MCS, management of right ventricular failure, and the future of MCS.**

**Heart transplantation remains one of the major scientific achievements of twentieth century medicine. During the past four decades, it has evolved from an unproven experimental surgical technique to the most effective form of therapy for refractory end-stage heart disease. It has captured the public's imagination and expanded our understanding of fundamental immunologic mechanisms that are responsible for cellular and humoral-mediated immunity. Despite its successes, many clinical and scientific problems remain. One or more bouts of acute cellular or humoral (vascular) rejection will occur in over 75% of transplant recipients despite current immunosuppressive strategies. Further, rejection directly results in approximately 20% of post-transplant deaths and is believed to play a major role in the development of late allograft dysfunction and coronary vasculopathy. This book by international experts in the fields of transplantation medicine, immunobiology and cardiac imaging provides the reader with an up-to-date, concise summary of the latest developments in the diagnosis and treatment of acute cardiac rejection. It is axiomatic that a more complete understanding of the pathogenic processes involved in rejection will ultimately lead to its prevention. This volume will be useful to transplant cardiologists, cardiovascular surgeons, cardiac pathologists and transplant scientists who seek to prolong the lifespan and improve the quality of life of their transplant recipients.**

**Advanced Heart Failure: from Pathophysiology to Clinical management, An Issue of Heart Failure Clinics, E-Book**

**A Practical Manual**

**Surgical Management of Congestive Heart Failure**

**Cardiovascular Genetics and Genomics in Clinical Practice**

**Mechanical Circulatory Support Therapy in Advanced Heart Failure**

**SPARKPLUG: The Roadmap to Confidently Ignite and Navigate Your Career Without Compromising Your Dreams** by Dr. Nasrien E. Ibrahim is a memoir interwoven with personal and career development tips for those balancing high-stress careers and their personal dreams. As an internationally recognized cardiologist and researcher, Dr. Nasrien developed the roadmap to guide others to live a life of purpose-fulfilling their personal needs while serving their communities. Readers will join the author on her journey to discovering the importance of managing emotional, physical, communal, career, and financial wellness. Come learn how to confidently navigate your career without compromising your life dreams. Understand and accept that part of wellness is loving yourself deeply and a full life is one lived with purpose. And then, alongside Dr. Nasrien, figure out how to find and nurture that purpose. SPARKPLUG is a soul-enlightening journey and a map to reigniting the dreams the little child inside each of us imagined.

It is a pleasure to introduce Volume 5 in the *Methods in Pharmacology* series. In 1971, Volume 1 of this series was published while I was Head of the Division of Myocardial Biology in the Department of Pharmacology at Baylor College of Medicine in Houston, Texas. I dedicated that first volume to Sir Henry Hallet Dale, who died on July 23, 1968. In the Preface I pointed out that many of the pharmacological advancements that occurred during the last century were direct descendants from the classic paper published in 1910 by Professor Dale and his colleague, Dr. Barger. In this paper, the concept of "specific receptor sites" was introduced by the statement that "the relationship of the receptor mechanism to the base [i. e. , drug base] may well be one of solid solution of adsorption and, therefore, more analogous to that of an enzyme to its substrate . . . ." I also pointed out at that time that the search for drug receptors continues and that fundamental knowledge of the nature of receptors and drug-receptor interaction will eventually lead to a rational approach to drug design. Since 1971, the study of receptors and their interaction with specific chemical substances has continued at an accelerated pace and this is due, in particular, to the introduction of new and exciting methodologies. The death last year of Professor Raymond P. Ahlquist, who pioneered the introduction of specific adrenergic receptors, represents the close of yet another era.

*Management of Heart Failure: Surgical* will provide the full spectrum of surgical options, ICU management and rehabilitation, while also referencing heavily the companion volume of *Management of Heart Failure: Medical* by introducing the medical options in heart failure. The contributing authors are all key opinion leaders in the medical management of heart failure. This volume is designed to integrate with its sister medical title, but also alone be the definitive guide to the surgical management of heart failure.

This issue of *Heart Failure Clinics*, guest edited by Drs. Giuseppe Pacileo, Daniele Masarone, Francesco Grigioni and Luciano Potena, will cover key topics in *Advanced Heart Failure: From Pathophysiology to Clinical Management*. This issue is one of four issues selected each year by our series consulting editor, Dr. Eduardo Bossone. Topics discussed in this issue include (but are not limited to): Pathophysiology of advanced heart failure: what I need to know for clinical management?, Advanced heart failure: definition, epidemiology and clinical course, Echocardiography in advanced heart failure: beyond diagnosis, Disease modifier drugs in patients with advanced heart failure: How to optimize their use?, Congestion in patients with advanced heart failure: Assessment and treatment, Inotropes in patients with advanced heart failure: Not only palliative care, Cardiac resynchronization therapy and cardiac contractility modulation in patients with advanced heart failure: How to select the right candidate?, Mitral and tricuspid valves percutaneous repair in patients with advanced heart failure: Panacea, or Pandora's box?, Left ventricular assist device: Indication, timing and management, Listing criteria for heart transplant: Role of cardiopulmonary exercise test and of prognostic scores, Right heart catheterization in patients with advanced heart failure: when to perform, how to interpret?, Advanced heart failure in special population: Cardiomyopathies, Advanced heart failure in special population: Pediatric age, Advanced heart failure in special population: Heart failure with preserved ejection fraction and Treatment of advanced heart failure: What future holds?. Provides in-depth, clinical reviews on advanced heart failure, providing actionable insights for clinical practice. Presents the latest information on this timely, focused topic under the leadership of experienced editors in the field; Authors synthesize and distill the latest research and practice guidelines to create these timely topic-based reviews.

Contemporary Heart Transplantation

The Roadmap to Confidently Ignite and Navigate Your Career Without Compromising Your Dreams

Cardiovascular Emergencies

Oxford Textbook of Advanced Heart Failure and Cardiac Transplantation