

SUGGESTED READINGS**General**

Zipe DP, et al, editors: *Braunwald's Heart Disease: A Textbook of Cardiovascular Medicine*, ed 9, Philadelphia, 2011, Elsevier Saunders. [An outstanding and authoritative text, with excellent sections on heart failure and atherosclerotic cardiovascular disease.]

Cardiac Structure and Specializations

Rasmussen TL, Raveendran G, Zhang J, et al: Getting to the heart of myocardial stem cells and cell therapy. *Circulation* 123:1771, 2011. [A well-written overview of the challenges and current state of the art regarding stem cell therapies in heart disease.]

Heart Failure

Ashrafian H, Frenneaux MP, Opie LH, et al: Metabolic mechanisms in heart failure. *Circulation* 116:434, 2007. [Good review of the molecular pathways underlying myocardial decompensation.]

Neubauer S: The failing heart—an engine out of fuel. *N Engl J Med* 356:1140, 2007. [Well-written overview of the mechanisms and therapeutic approaches in congestive failure.]

Congenital Heart Disease

Bruneau BG: The developmental genetics of congenital heart disease. *Nature* 451:943, 2008. [Succinct overview of the relationships between cardiac development and congenital heart disease.]

Dinardo JA: Heart failure associated with adult congenital heart disease. *Semin Cardiothorac Vasc Anesth* 17:44, 2013. [Well-written summary of the consequences of congenital heart disorders seen in the adult population.]

Huang JB, Liu YL, Sun PW, et al: Molecular mechanisms of congenital heart disease. *Cardiovasc Pathol* 19:e183, 2010. [Comprehensive review of the genes and pathways underlying congenital heart disease.]

MacGrogan D, Nus M, de la Pompa JL: Notch signaling in cardiac development and disease. *Curr Top Dev Biol* 92:333, 2010. [A scholarly review of the role of Notch in cardiac development.]

Ischemic Heart Disease

Hausenloy DJ, Yellon DM: Myocardial ischemia-reperfusion injury: a neglected therapeutic target. *J Clin Invest* 123:92, 2013. [Nice discussion of the mechanisms and possible therapeutic approaches in ischemia-reperfusion injury.]

Libby P, Theroux P: Pathophysiology of coronary artery disease. *Circulation* 111:3481, 2005. [A well-written review of the pathways, as well as the diagnostic and therapeutic implications of atherosclerotic coronary disease.]

Nabel EG, Braunwald E: A tale of coronary artery disease and myocardial infarction. *N Engl J Med* 366:54, 2012. [A terrific overview of the history of our understanding of the pathophysiology of coronary artery disease, and the successes of informed therapeutic interventions.]

Ovize M, Baxter GF, Di Lisa F, et al: Postconditioning and protection from reperfusion injury: where do we stand? Position paper from the Working Group of Cellular Biology of the Heart of the European Society of Cardiology. *Cardiovasc Res* 87:406, 2010. [A good overview of the mechanisms and potential therapeutic interventions for ischemia-reperfusion injury and for ischemic pre-conditioning in limiting infarct size.]

Yellon DM, Hausenloy DJ: Myocardial reperfusion injury. *N Engl J Med* 357:1121, 2007. [Great review of the mechanisms and potential therapeutic approaches to limiting reperfusion injury after MI.]

Arrhythmias

Cerrone M, Priori SG: Genetics of sudden death: focus on inherited channelopathies. *Eur Heart J* 32:2109, 2011. [Up-to-date, well-organized description of the known ion channel disorders that cause sudden cardiac death.]

Hypertensive Heart Disease

Farber HW, Loscalzo J: Pulmonary arterial hypertension. *N Engl J Med* 351:1655, 2004. [Although a little older, this remains an excellent review of right-sided hypertension-associated pathology.]

Valvular Heart Disease

Bhattacharyya S, Davar J, Dreyfus G, et al: Carcinoid heart disease. *Circulation* 116:2860, 2007. [Good review of the current thinking on pathophysiology, diagnosis, and treatment of this entity.]

Guilherme L, Köhler KF, Kalil J: Rheumatic heart disease: mediation by complex immune events. *Adv Clin Chem* 53:31, 2011. [A well-written and scholarly discussion of the pathogenic mechanisms regarding rheumatic heart disease.]

Hill EE, Herijgers P, Herregods MC, et al: Evolving trends in infective endocarditis. *Clin Microbiol Infect* 12:5, 2006. [Good, clinically-oriented overview of the developments in microorganisms, diagnosis, and therapies for infective endocarditis.]

Li C, Xu S, Gotlieb AI, et al: The response to valve injury. A paradigm to understand the pathogenesis of heart valve disease. *Cardiovasc Pathol* 20:183, 2011. [Nice overview of pathologic concepts in valvular disease.]

New SE, Aikawa E: Molecular imaging insights into early inflammatory stages of arterial and aortic valve calcification. *Circ Res* 108:1381, 2011. [A good overview of the mechanisms leading to degenerative calcification on valves and vessels.]

Schoen FJ: Cardiac valves and valvular pathology. Update on function, disease, repair, and replacement. *Cardiovasc Pathol* 14:189, 2005. [Excellent review on mechanisms of valve disease and therapeutic approaches.]

Cardiomyopathies

Azaouagh A, Churzidse S, Konorza T, et al: Arrhythmogenic right ventricular cardiomyopathy/dysplasia: a review and update. *Clin Res Cardiol* 100:383, 2011. [Excellent up-to-date look at this entity and its genetic causes.]

Cooper LT Jr: Myocarditis. *N Engl J Med* 360:1526, 2009. [A nice review of etiology, pathogenesis, and clinical features.]

Herman DS, Lam L, Taylor MR, et al: Truncations of titin causing dilated cardiomyopathy. *N Engl J Med* 366:619, 2012. [Elucidation of the common association of titin mutations with dilated cardiomyopathy.]

Maron BJ, Towbin JA, Thiene G, et al: Contemporary definitions and classification of the cardiomyopathies: an American Heart Association Scientific Statement from the Council on Clinical Cardiology, Heart Failure and Transplantation Committee; Quality of Care and Outcomes Research and Functional Genomics and Translational Biology Interdisciplinary Working Groups; and Council on Epidemiology and Prevention. *Circulation* 113:1807, 2006. [Consensus document regarding an updated classification of cardiomyopathies, heavily weighted to genetic etiologies rather than pathophysiologic manifestations.]

Patten IS, Rana S, Shahul S, et al: Cardiac angiogenic imbalance leads to peripartum cardiomyopathy. *Nature* 485:333, 2012. [New perspective on the mechanisms underlying pregnancy-associated cardiomyopathy.]

Seidman CE, Seidman JG: Identifying sarcomere gene mutations in hypertrophic cardiomyopathy: a personal history. *Circ Res* 108:743, 2011. [A well-written and authoritative overview of the genetics and pathophysiology of hypertrophic cardiomyopathy from one of the leading groups in the world.]

Tumors of the Heart

Cheng H, Force T: Molecular mechanisms of cardiovascular toxicity of targeted cancer therapeutics. *Circ Res* 106:21, 2010. [Excellent and thoughtful review of the common pathways involved in tumorigenesis and cardiac development and homeostasis.]

Sawyer DB: Anthracyclines and heart failure. *New Engl J Med* 38:1154, 2013. [Succinct overview of chemotherapeutic cardiotoxicity.]

Cardiac Transplantation

Kittleson MM, Kobashigawa JA: Antibody-mediated rejection. *Curr Opin Organ Transplant* 17:551, 2012. [Good succinct review of the mechanisms, diagnosis, and therapeutic interventions in antibody-mediated rejection.]

Mitchell RN: Graft vascular disease: immune response meets the vessel wall. *Annu Rev Pathol* 4:19, 2009. [Comprehensive overview of allograft arteriopathy, including animal models, pathogenic mechanisms, clinical diagnosis, and therapy.]