

Americans have been diagnosed with heart failure. This leads to an annual cost exceeding \$33 billion. Luckily, the progression of heart failure can be greatly reduced by early treatment. Abraham and Krum have contributed a nicely concise, yet comprehensive review of the evidence-based treatment modalities.

The book is cleanly divided into 22 exceedingly readable chapters of 10 to 20 pages, written by various experts in each field. The early chapters provide a background and historical framework to discuss the definitions of heart failure along with the epidemiology, pathophysiology, and clinical presentation. However, the true substance and strength of the work revolves around the individual chapter discussions of each particular treatment modality from non-pharmacologic treatments to specific medications to surgery and transplantation options.

Each chapter is thoroughly referenced with all of the relevant and up-to-date clinical studies should the clinician want to refer to the detailed primary literature. I particularly appreciated the concluding chapter, which served as a very helpful recapitulation of the main objectives of each section. This chapter included efficient “at-a-glance” algorithms for the clinician to follow with regard to establishing an accurate diagnosis and subsequent treatment approach.

Additionally, I was impressed by the lengthy chapter on the use of digitalis in heart failure patients, since guidelines in this area have previously been muddled. The medication and its pharmacodynamics are discussed in impressive detail while still staying on point for the busy clinician. The authors successfully distill the relevant clinical trials and subsequently consolidate the findings into a clear set of recommendations for each patient population.

However, one weakness is the chapter on the use of diuretics, which stands out with its convoluted sentence structure and relatively poor organization. This difficulty is exacerbated by overly complicated figures that contribute little and seem at odds with the otherwise succinct nature of this book. In fact, the entire book’s graphics are visu-

ally uninteresting black-and-white figures and tables. I found this disappointing, as they do not draw the reader’s attention.

Despite these shortcomings, *Heart Failure: A Practical Approach to Treatment* succeeds handsomely in exactly what it sets out to accomplish. The book provides a crisp and inclusive one-stop clinical resource for the management of patients with heart failure.

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Genomics and Evolution of Microbial Eukaryotes. By Laura Katz and Debashish Bhattacharya. Oxford, UK: Oxford University Press; 2008, 256 pp. \$60, Paperback. ISBN: 978-0199229055.

Genomics and Evolution of Eukaryotic Microbes by Laura A. Katz and Debashish Bhattacharya is a concise, up-to-date text on microbial eukaryotic (protists) diversity and genome evolution. Understanding the diversity of protists is of paramount importance, considering that these microorganisms affect both our environment and health. Indeed, this group of organisms contains some of the deadliest known pathogens to men, such as the causative agent of malaria: *Plasmodium falciparum*.

With a goal to convey a basic appreciation and understanding of the topic to a wide scientific community, the authors have assembled a volume of 15 articles representing the analyses and interpretations of leaders in the field. The first section provides an overview of the tremendous diversity and phylogeny of protists, which amount to approximately 200,000 described species. This section sets the stage for the proceeding sections by presenting current hypotheses in the field. Part two addresses the evolutionary genomics of protists via the examination of a few examples that exemplify the unique genomic architecture represented within the different clades. Finally, the third section of the text aims to provide the reader with an in-depth knowledge of synthesized data from the completed genomes of protists, in-

cluding the approaches used to characterize the respective genomes. The last section is particularly interesting in that it brings to the forefront many discoveries challenging some of the principles of genome evolution.

Using a precise writing style, the authors successfully have provided an easy-to-understand text for the complex and important field of protist evolutionary biology. Furthermore, the organized layout of the chapters makes it easy for the reader to progress through the complex layers of the field. Consequently, this book would provide a viable text for students from a broad range of disciplines interested in understanding both the micro and macro working of genomes.

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The Cancer Clock. Edited by Sotiris Missailidis. West Sussex, England: John Wiley and Son Inc.; 2007, 320 pp. \$55, Paperback. ISBN: 978-0470061527.

The Cancer Clock, edited by Sotiris Missailidis, covers virtually every aspect of cancer. The book fulfills its intention of informing cancer patients and the general public about treatment of myriad cancers. Although opinions as to which treatment options are best are not offered, the book allows patients to gather the facts and information needed to aid them in their own decision making.

The book is also useful for graduate students interested in cancer biology. It helps non-clinicians understand medical jargon. For example, tables are used to illustrate different names for drugs and which types of cancer they are used to treat. On the flip side, *The Cancer Clock* can aid clinicians in understanding the molecular pathways underlying cancer, such as the p53 pathway. Therefore, the information presented in this book could aid collaborations between researchers and clinicians.

Although each chapter is written by a different person, the overall flow is not com-

promised. A helpful aspect of the book is that important information is highlighted in red boxes within the chapters. The “self-assessment questions” at the end of each chapter allow the reader to test his or her knowledge of the material. Each chapter also includes a helpful list of further reading and recourses.

The first few chapters of the book outline possible causes of cancer, including socioeconomic, environmental, and genetic factors. For example, alcohol metabolism is outlined and the effect of alcohol metabolites of cancer is discussed. The effects of diet, smoking, and bacterial infections also are elucidated. Explanation of classic examples of cancer genes, such as BRCA1 and BRCA2, are included. The section on nutrigenomics, the study of how food and other environmental factors influence gene expression, is particularly interesting.

The next several chapters cover diagnosis, surgery, and therapy. The comparisons of normal and cancer histology images are noteworthy. However, such medical detail may be overwhelming for a reader without a biology background. Although the surgery chapter is very short and does not offer much detail, there is an interesting discussion of different kinds of prophylactic surgery. I found the chapter on cancer therapy to be particularly helpful. Topics include radiation therapy, drugs targeting specific proteins, antibody therapies, cancer vaccines, and anti-sense therapies.

In addition to an excellent explanation of the medical and scientific aspects of cancer, the book offers an extensive discussion of ethical and personal aspects of cancer. For example, the palliative care chapter discusses how psychology and spirituality can influence cancer treatment. The sample dialogs between a cancer patient and a therapist were especially interesting. Another topic covered is physical therapy and its use to treat cancer patients.

I highly recommend the *The Cancer Clock* to patients. Although not all of the information is relevant to each patient, the organization of the book makes it easy to look up the pertinent information. Hopefully, it