

introductory textbook. It is specifically aimed at medical students learning neuroanatomy, but residents in the neurosciences also have been known to find it a helpful reference. The book has two separate but integrated parts. The first few chapters and the first pages of later chapters are standard didactic text, which is well-written and concise. The second sections of most chapters include clinical case presentations intended to illustrate the key features of the neurological system being discussed.

One of the earlier chapters is dedicated to the neurological exam. The maneuvers are described in detail, with many accompanying pictures. The companion Web site has videos demonstrating and describing correct techniques as well. The procedures are not taught for purely rote memorization; basic science rationales are provided. Explanations of both normal and abnormal results are included in a comprehensive and clear manner.

Another notable early chapter provides a solid introduction to neuroimaging. The physics behind the subject are briefly explained, and the mechanisms for key modalities are reviewed. A plethora of images are used to identify key structures. The level of detail is definitely enough for a clinical medical student, and residents could find it useful as a refresher.

The clinical cases presented in the text include relevant physical and laboratory findings and often imaging. The tables included are great references, some ready to be copied and carried in a white coat. Occasionally, principles of treatment are included.

The improvements from the first edition include a more readable color scheme and page layout. There are some new cases, and the basic science content has been revised and updated. The companion Web site will be fully released in Fall 2010. The new edition is more completely integrated with the Web site, allowing for a more seamless use of resources.

Overall, this book is a great introduction to clinical neuroanatomy. It is a readable and clean-looking text, and the price is

reasonable. The content is relevant to both pre-clinical and clinical students and can serve as a basic reference during residency.

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An Introduction to Conservation Genetics. 2nd edition. By R. Frankham, J. D. Ballou, and D.A. Briscoe. Cambridge, UK: Cambridge University Press; 2009. 618 pp. \$75, Paperback. ISBN: 978-0521702713.

The conservation of biological diversity is a non-trivial ecological concern that has grown as human populations have expanded. In *Introduction to Conservation Genetics*, Frankham, Ballou, and Briscoe have endeavored to provide a textbook to introduce students to genetic analysis in conservation biology. The resulting text maintains an impressive fluidity and is both thorough and instructive, but it has a few weaknesses worth mentioning.

From start to finish, *Conservation Genetics* maintains a coherent flow of information. Each chapter builds upon, and frequently incorporates, lessons from previous chapters while reinforcing critical concepts. These lessons are based on real data from a variety of previous studies, giving students a window into real problems that conservation biologists face. Moreover, many of these examples are accompanied by precise illustrations of the relevant organisms. They are grayscale illustrations, which limit their impact, but still enhance the reading and learning experience. The book also includes impressively instructive illustrations to diagram gene-flow schemes, pedigrees, and other complex examples.

While the first few chapters focus largely on broad concepts, the authors dive into mathematical concepts such as Chi-squared analysis beginning in the fourth chapter. As the book progresses, more complex formulae are introduced, as are formulae that can be derived from previously presented equations. This progressive in-

roduction of derived formulae helps reinforce what each variable represents, contributes to the flow of the text, and presents a sense of coherence in the mathematical tools used in the field. Examples typically include step-by-step walkthroughs of how to use the equations presented — quite a boon for less mathematically apt students. Altogether, the vast majority of equations are utilized in such examples. While some could stand to have their derivations presented, the overall text provides excellent instruction on the use and utility of the included equations.

While hardly abject disappointments, the end-of-chapter sections may be the weak point of the text. Each chapter concludes with a summary and references for further reading, both of which are perfectly useful. They also have problems that revisit key concepts and equations presented in the chapter. However, very few of the exercises engage the reader in critical thinking. Many chapters also list software tools available to researchers, but they are rarely utilized in the problems. Since computations tools can be very daunting to use, an instructor may find it beneficial to develop exercises utilizing these programs.

A few omissions, such as an equations appendix, somewhat weaken the value of *Conservation Genetics* as a reference. With neither end-of-chapter nor end-of-book equations appendices, one must hunt through chapters to find an equation. A more minor omission is a Chi-square table. Since Chi-square analyses are a handy population genetics tool and the authors include Chi-square analyses in their text and problems, a table of Chi-square values would prove helpful.

As a textbook, *Introduction to Conservation Genetics* is quite well written. The flow of the text keeps a reader's attention, the material is thoroughly covered and illustrated, and the mathematical tools are particularly well explained. While there are noted weaknesses, they are not egregious, and can be easily overcome by an interested student or a creative instructor. Indeed, both should find this text a useful foundation for

the learning and teaching of conservation genetics.

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Cardiovascular Regeneration and Stem Cell Therapy. Edited by Annarosa Leri, Piero Anversa, and William H. Frishman. Malden, MA: Blackwell Publishing; 2007. 229 pp. US \$146.95, Hardcover. ISBN: 978-1405148429.

Cardiovascular Regeneration and Stem Cell Therapy is a collection of journal-like articles compiled and edited by Annarosa Leri, Piero Anversa, and William Frishman. The book is a good compilation of current knowledge regarding the field of cardiac regeneration and stem cell therapy, but is clearly intended for an audience already familiar with the terminology. The text would make an appropriate reference or primer for both researchers and medical practitioners. The book, however, must be read with caution: The editors are confident that stem cells will become the treatment of choice for heart failure, and the only question that remains is whether to use bone marrow or cardiac-derived stem cells. They fail to adequately acknowledge the possible limitations of stem cell therapies and to objectively discuss the merits of competing techniques.

The book is broken into five parts, each consisting of several chapters. Each part attempts to convince the reader of some component of the editors' doctrine, such as the plasticity of stem cells, the inherent regenerative capacity of the heart, and the bright prospects of stem cell therapy. The clear bias on the part of the editors is, however, greatly ameliorated by the quality of each individual chapter. The chapters flow from one to the other more cleanly than is usually the case with compilations, and each successive author builds on ideas and terms introduced in previous chapters. Of particular note is Part IV (Cardiac Progenitor Cells and Heart Failure), which follows a neatly logical progression starting with a focus on basic