

laboratory techniques in more detail, this book will be a valuable resource both for undergraduate students and qualified staff studying for further professional examinations in clinical biochemistry.

A feature which I'm sure will appeal to lecturers and training officers is the Oxford University web resource for this volume ([www.oup.com/uk/orc/ahmed](http://www.oup.com/uk/orc/ahmed)) which offers registered adopters of the text the opportunity to access the figures used in the volume in electronic form so that they can use them in their own environment and lectures.

**G. Lloyd**

## Healthcare Biotechnology. A Practical Guide

*D. Dogramatzis. London: CRC Press, 2010*

ISBN-10: 1439847460, ISBN-13: 978-1439847466. 689 pp. £63.99.

This book is probably best suited to those wishing to evaluate the commercial potential of a biotechnology company, including biotechnology business students, bio-incubation managers, pharmaceutical leaders and those wishing to set up a business for themselves in the biotechnology sector. It covers all aspects including the healthcare biotechnology industry, intellectual property, funding, new products, marketing, and running a business. The background of the author, who held leadership positions with Hoffman-la Roche and Serono, does slant the book's perspective towards that of a pharmaceutical executive determining the buy-out potential of a biopharmaceutical business. That said, it does cover most aspects of setting up, running and commercialising a business, with the ultimate goal of a sale or collaboration with 'big Pharma'.

The book offers small sections, with practise questions at the end of each section, to reinforce application of the knowledge. So, for example, the chapter on biopricing ends with the question 'Biopharmas have used various innovative pricing strategies in Europe. Which are the main advantages and disadvantages of these approaches?' The questions also force the reader to assume the thought processes of various stakeholders, such as civil servants within a country's health department, a biopharmaceutical employer, clinicians and customers.

Of particular interest to someone setting out on this biotechnology business journey is the tricky path through biofinance, including venture capital and business angels. The section on marketing is also particularly strong and well thought through. There are some slight criticisms, however. For example, biomanufacturing is also covered but from the very specific angle of protein manufacture.

Biopharmaceutical/biotechnology companies operate in a highly regulated environment, as do large well-known pharmaceutical companies. Although this regulatory environment is mentioned, briefly, it is not covered in any depth in the book. This may be a serious oversight when one considers the legal powers of the US Food and Drug Administration (FDA). The emerging sector of personalised healthcare is touched on briefly but not covered to any great extent, and some of the current leading

players in the world of companion diagnostics are not discussed.

To summarise, this useful book provides an oversight into the biotechnology business sector. My only criticisms of the book are that it cannot possibly keep up with the latest developments in the biotechnology sector (what book can?), and that biotechnology is such a vast topic that it can only skim the surface of the subject.

**J. Theaker**

## Medical Genetics

*I. D. Young. Oxford: Oxford University Press, 2010.*

ISBN 978-0-19-959461-0. 297 pp. £29.99.

This is a second edition of a general introduction to genetics set out over 14 chapters. The layout of the book is well structured, with recommended reading and multiple-choice questions to check understanding. Each chapter also includes a review of key papers or research on the topic as well as interesting case notes to sustain the reader's interest.

The first three chapters cover the basic structure of the gene and chromosome. This is then followed by two chapters on simple Mendelian inheritance and one covering polygenic inheritance for complex disorders. Chapters 7–12 are entitled 'Genes and...' and cover a range of topics including population genetics, human development, cancer and pharmacogenetics. The last two chapters deal with clinical skills required by a clinician and applications to clinical genetics. The book is up to date and covers more modern research topics such as pharmacogenetics and pharmacogenomics.

The book is clearly written for medical students and provides in the appendices the basic knowledge and clinical skills recommended by the American Society of Human Genetics Information and Education Committee and the Joint Committee on Medical Genetics and the British Society of Human Genetics in the UK. However, biomedical scientists should find the clinical details of the single gene disorders and the diagnostic tests available of interest and the basic genetics covered in the first three chapters are accessible for anyone studying a genetics module.

**T. Pinel**

## Microbiology. An Evolving Science

*J. L. Slonczewski, J. W. Foster. London: Norton, 2010: 2nd edn.*

ISBN-13: 978-0-393-93447-2. 1100 pp. £48.99.

This is a comprehensive textbook aimed at undergraduates in biology, biomedical science and microbiology. The text is modern in appearance, with many excellent colour diagrams, including many 3D models of proteins and other macromolecules, biochemical and signalling pathways, and blocks of text highlighting key points. There are also icons to inform the reader that online resources are available (e.g.,