the vast store of knowledge of how our molecular bits and pieces work. Since Molecular Biology of the Cell by Alberts et al. revolutionised the art of explaining biology some 17 years ago, diagrams of stunning clarity accompanied by digestible bites of text and, more recently, alluring colour pictures are de rigueur in all such books. It is unfathomable how my local bookshop manages to sell items by Lord Archer when such seductive goodies are on display a few feet away. Two of a recent clutch (Molecular Cell Biology (4th edition) by Harvey Lodish et al. and Lehninger Principles of Biochemistry (3rd edition) by David L. Nelson and Michael M. Cox) are replete with all of these features and have interactive CDs to facilitate even greater intimacy with the secrets of life. The claim in the preface to the 4th edition of Lodish et al. that it has been ‘completely rewritten’ since the edition of 5 years ago is something of an exaggeration. Nevertheless, the authors have substantially restructured the book and included with great clarity and wonderful diagrams the startling advances that have occurred in molecular biology since 1995. Thus bioinformatics becomes a new entry in the index, the chapter including a summary of the power of DNA sequence data for the prediction of protein function, exemplified by NF1 and BRCA1, and an introduction to genomics that includes the map of the complete genome of Mycoplasma genitalium. In a similar reflection of the expansion of our knowledge, apoptosis has enlarged from two paragraphs in 1995 to six pages that include pictures of ced-1 Caenorhabditis elegans larvae and schematic pathways illustrating the role of AKT, 14-3-3 protein and BAD in the regulation of the cell cycle and a basic description of DNA microarrays is as complete and clear as I have yet seen in a textbook. In the Question and Answer programme on the CD a significant effort has gone into providing a helpful comment in response to the wrong answer to a question, an improvement on
the normal tactic of leaving students with a large red cross.

The preface to Karp’s 2nd edition of *Cell and Molecular Biology* explains that the emphasis is on experimental approaches through the use of, *inter alia*, high quality pictures to convey the processes involved. The diagrams are indeed superb and there is a large number of beautiful photographs illustrating key points. This edition features an increased number of the overview figures at the outset of chapters and is augmented by a new chapter on the Immune Response. A notable feature of the Karp edition is the expansion of sections entitled The Human Perspective that summarise the human disorders that can arise from disruption of molecular functions discussed in the foregoing chapter. These are concise but comprehensive (it’s hard to think of another molecular biology textbook that mentions long QT syndrome!) and are an ideal vehicle to convince clinical students that biochemistry is good for them. Each chapter includes an Experimental Pathways section that traces the historical development of the topic through summaries of key experiments, sometimes including data from original papers – an excellent way to convey how the subject has evolved. Among its particularly up to date features, Gerald Karp’s book includes a section in the Cancer chapter on angiogenesis, as does Lodish et al., but in Karp the information imparted extends to a scheme showing the effect of endostatin on mouse tumours, replete with photographs of mice from such an experiment. All of this has resulted in a book that is focused but highly informative and a delight to browse through.

If it appears by now that your reviewer is suggesting you should dash out and buy all three of these books, I can only admit that I am delighted to have them on my shelf. If you have to choose, for fundamental biochemical science with a fair degree of breadth thrown in it has to be *Lehninger*. For a comprehensive molecular biology course Lodish et al. is the equal of anything else on the market. For a broad grounding in cell and molecular biology that will appeal especially to medical students go for Karp.

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