Dictionary of Biochemistry and Molecular Biology (2nd edn)

by J. Stenesh, John Wiley & Sons, 1989. £47.00 (vii + 525 pages) ISBN 0 471 84089 0

A year or so ago, I found myself reviewing a dictionary for *TIG*, and I'm pleased to say that the opportunity has come round again, with the arrival of the second edition of Stenesh's *Dictionary of Biochemistry and Molecular Biology*. This set me wondering, once more, what the purpose of a dictionary should be. I am sure I am not the only person who ends up reading far more entries than the one he initially intended to consult. Simply browsing, and finding words or phrases you never knew existed, must be one of life's more harmless but enlightening pleasures, and beats learning railway timetables any day. After all, I always thought that 'old yellow enzyme' described the stuff you found in the bottom of the polymerase pot just when you came to do the crucial experiment five minutes after the stores closed for the weekend. I have to confess that I had quite forgotten (if I ever knew) that it was actually a yeast flavoprotein isolated by Warburg and Christian in 1932.

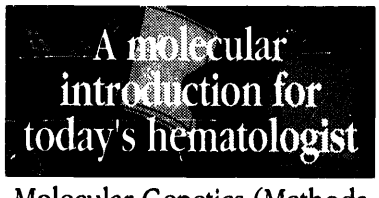
But not only is it interesting and sometimes useful to know *what* words mean, it's often equally worthwhile to know *why* they mean it, and Dr Johnson (whom I always seem to quote in my book reviews) was right to define a lexicographer as 'a writer of dictionaries; a harmless drudge, that busies himself in tracing the original'. Of course, every schoolboy (and schoolgirl) knows that 'thylakoid' comes from the Greek word for baggy trousers, such as those worn by Persians. Yet 'I say, you look wonderful in those thylakoids' isn't in my experience a good way of starting up a conversation at a dinner party. Maybe that's because the same word can also be a term of abuse, roughly translated as 'windbag' (perhaps the ancients knew that the oxygen-evolving activity of photosystem II was in the thylakoid lumen), a small bag for putting marbles in, and a certain part of the male anatomy. And I'm grateful to one of my more erudite colleagues for pointing out that 'stroma' comes from the Greek word for a bed or mattress. Doubtless many a cladist would sleep more easily on his stroma if he knew that his subject was derived from κλαδος, a branch, rather than *clades*, a disastrous occurrence.

Nevertheless, thylakoid that I am, I am digressing. The point I am trying to make is that I quite like a dictionary to give not just meanings of words but also their etymologies. The *Dictionary of Biochemistry and Molecular Biology* gives a few, but for the most part they are rather obvious ones, such as 'Charon bacteriophage' (although anything that might dissuade people from pronouncing it 'Sharon' must be a Good Thing). I would certainly have liked to see more, but I have to admit that very few technical dictionaries make any attempt at all to satisfy this pedantic curiosity and I suppose I should be grateful even for a nod in my direction.

This rather idiosyncratic criticism apart, I am happy to recommend the book. Most of the test sample of words and phrases that I looked up were represented, with definitions that were generally clear and, so far as I could tell, accurate. The cross-referencing was helpful. The ground covered ranged from the heavily physicochemical through to the trendily molecular biological, with a generous helping of more classical botanical and zoological terms, and I am sure this book would be both comforting and useful in your departmental library. Incidentally, if anyone can tell me how chaulmoogric acid got its name, I should like to hear from them.

CHRISTOPHER J. HOWE

Department of Biochemistry, University of Cambridge, Tennis Court Road, Cambridge CB2 1QW, UK.



Molecular Genetics (Methods in Hematology Vol. 20)

edited by Edward J. Benz, Jr, Churchill Livingstone, 1990. £35.00 (v + 208 pages) ISBN 0 443 03852 X

Molecular Genetics is part of a series of monographs that cover a broad range of topics in both clinical and basic laboratory hematology; this volume is a hematologist's eye view of the techniques of modern molecular biology. Benz has assembled an excellent collection of experts in the field who each present a specific set of experimental methods, including details of their personal lab protocols. The book is an outgrowth of a successful educational program that has become a regular session at the Annual American Society of Hematology Meetings, and has served as an exciting introduction to this often intimidating field for many hematologists. Benz lectured in this program for several years, as have several of the other contributors, and this monograph may be particularly attractive to 'graduates' of this educational program.

The chapters are in general clearly and informally written, making for easy reading. A reasonable uniformity of style and format has been achieved among the authors, largely avoiding the abrupt changes from chapter to chapter that blight many multi-author monographs.

The book begins with a short, general introduction, starting with the structure of DNA and the genetic code and proceeding through an overview of bacterial enzymes used in recombinant DNA technology. This introduction assumes no prior knowledge and is a nice, concise overview for the uninitiated. The remaining 12 chapters cover specific methodologies, including RNA and DNA preparation, northern and Southern blotting, cDNA cloning and sequencing, and DNA transfection. Each chapter begins with a general introduction to the method, followed by often detailed specific protocols from the author's laboratory. This is obviously a very selected list of protocols, given the short length of this monograph compared with some of the more