Book Reviews

Annual Review of Genetics, Vol. 24, edited by Allan Campbell, B.S. Baker, E.W. Jones. Illustrated. Annual Reviews Inc., Palo Alto, California, 1990. Hardback \$42.00.

A single volume acting as host for the massive subject of genetics, makes very strange bedfellows of some of the review articles of which this high quality textbook consists. We have chapters on the genetics of various prokaryotes – aspergillus, bacteria, phage and retroviruses together with others on plant genetics, of course *Drosophila* and then on genetic mechanisms and some disorders in man.

The editors have made no attempt to have any themes develop within the book, e.g. a chapter on the genetic response to slow virus (prion) infection is 10 chapters away from generation of diversity in retroviruses; a chapter on protein secretion by Gram negative bacteria is nowhere near another on 'Genetic analysis of protein export in *E. coli*'.

Many of the medical topics which the book covers deal with, as yet, imperfectly understood mechanisms such as the genetics of slow virus infections, where separating between agent and host is becoming better understood. An exception is the very clear chapter on the LDL locus in familial hypercholesterolaemia, where Hobbs and Russell join Brown and Goldstein in further elucidation of their great work. Neel and Lewis use increasingly sophisticated techniques to measure effects of radiation in humans and mice but are still left having to admit that the mouse is a poor model for extrapolation to humans, that host factors remain the imponderable and that one is still left having to guess at the mutation doubling dose.

The chapter on human tumour suppressor genes by Stanbridge provides very interesting and useful information with clear explanations of some of the experimental techniques and results.

The book has a place, even a valuable place, in the science section of major libraries but on very few personal bookshelves. Dividing the genetics series into more specialised issues would increase specific appeal.

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Annual Review of Microbiology, Vol. 44, edited by L. Nicholas Ornston. Pp. xii + 730, illustrated. Annual Reviews, Palo Alto, California, 1990. Hardback \$42.00.

Microbiology is a vast subject. For a medical microbiologist to attend a meeting on general microbiology makes one feel rather humble. One hears papers on subjects as diverse as brewing, the viruses that cause extensive disease in plants and on bacteria that live in jet aircraft fuel (believe me – an important subject!). This Year Book covers a similar broad scope. Genetic manipulations in methylo-trophic bacteria sounds rather

dull until it is realised that such bacteria may be able to bio-degrade a wide range of hazardous waste. Similarly, sessile bacteria which once were a nuisance in colonising microscope slides are now understood better and may be used to control slimes in lakes and rivers. There is a fascinating chapter on *Caulobacter* which divide in an asymmetric fashion to produce one stalked cell and one swarming cell – unlike any bacteria I have come across. Why and how this creature behaves like this is unknown.

As you can now tell, there is a lot here to interest the general microbiologist. How much is of interest to the medical fraternity? There is a good review of *Helicobacter pylori* (subtitled 'a new twist to an old disease' – oh dear) which is long on the biochemistry of this fascinating pathogen but short on treatment. There is a rather slim chapter on AIDS (surely one of the greatest threats to mankind) – which contains only one half page on prevention and control – far too little.

Other chapters include spore germination genetics, the proteins of *Neisseria* sp, a *Pseudomonas aeruginosa* toxin, the genetics of corona virus and picornavirus and, in parasitology, genetic diversity in malaria and the determinants of *Leishmania* virulence.

As can be seen there is little here for the routine practising infectious disease physician or medical microbiologist. Academic departments, especially those on the leading edge of biotechnology might wish to have this relatively inexpensive book in their library.

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Child Psychiatry: A Primer for those who work closely with children, R. Dean Coddington and Millie M. Wallick. Pp. xii + 250. Warren H. Green, St. Louis, 1990. Paperback £29.50.

The opening page of the first chapter of this book might deter those who are hoping for a concise overview of the field, as the case examples quoted seem very homely. In my opinion, it is worth continuing, for the book achieves what it sets out to be: a primer which covers the field, combining a variety of different perspectives, addressing the developmental, physical, environmental and psychological aspects of child psychiatry.

The authors are a child psychiatrist who came to the subject through paediatrics, and an academic educationalist who has specialised in early childhood education. Most of the chapters are by the first author, and there are six other contributing authors.

The first five chapters are on the main stages of childhood, with one on families. The next five cover the general themes of anxiety, depression, conflict and coping, with an overview of psychological defence mechanisms, together with some ethological insights. The remaining eleven chapters deal with specific disorders, or

types of disorder.

Behaviourally and psychodynamically informed treatments are discussed, though there is no reference to cognitive strategies. Details of family therapy are not discussed.

The book is easy to read and the chapters are short enough to finish at one sitting. The style is descriptive and discursive, rather than definitive. In general, the authors give an overview of a topic, and raise areas of debate in the field without embarking on a detailed academic discussion. In some sections, for instance the chapter on mental handicap, the discussion is rather limited.

I recommend this book to medical students and others who are seeking an introductory text to child psychiatry, a subject that can be bewilderingly nebulous, but is here laid out in an accessible and digestible manner.

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Horizons in Medicine, edited by Leszek K. Borysiewicz. Pp. 330, illustrated. Transmedica Europe, Tunbridge Wells, 1990. Hardback £20.00.

The 4 day annual Advanced Medicine Conference at the Royal College of Physicians much resembles school speech-days – the good, the great and the growing are assembled together for the approval and erudition of College Fellows.

Educationalists may be appalled at an education 'interface' which involves large numbers of ageing physicians listening to more than 40 talks of 20 minutes (plus 4 × 1 hour state-of-the-art lectures without subsequent questions). However, like the humble Seagull outboard it remains inexplicably popular. Nonetheless this educational equivalent of repeated blanket bombing does need supplementing with the written word.

The Conference reflects the interest and location of the organiser who subsequently edits the relevant *Horizons in Medicine*. This issue therefore has a distinctly Cambridge feel.

There were two predominantly clinical sections on respiratory medicine and cardiology; the 'special effects' slot was audiology. BSE of course was on everyone's mind last year and Richard Kimberlin's contribution was outstanding (basically: Watch this space in 3 years time and as soon as I know you'll know).

The book is an invaluable part of the Conference and is always an authoritative state-of-the-art or rather state of the science contribution. I think it would help if it was available a little less than a year after the meeting. One or two of the contributions took longer to read than the time allowed for the talk but on the whole there was not too much additional material inserted presumably due to Leszek Borysiewicz's editorial pen being mightier than the words of his contributors. The annual *Horizons in Medicine* is an essential acquisition for aspiring and established physicians.

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Ethical Practice in Clinical Medicine, William J. Ellos. Pp. 190. Routledge, London, New York, 1990. Hardback £30.00, paperback £8.99.

Medical ethics has become fashionable in the last two decades and there is no shortage of books on the topic. This addition to the corpus takes a relatively unconventional approach to the philosophical basis of medical ethics. Most texts have taken their philosophical foundations from Hippocrates and then from the deontological theories of Kant and the utilitarianism of Bentham and Mill and their later apologists. In this book the author, a Jesuit priest, invites a return to virtue-based ethics deriving from Plato and Aristotle, via Aquinas, the 18th Century Scottish moral philosophers such as Hutcheson and Hume to the American pragmatists James, Dewey and Wilson to derive a contemporary bio-psycho-social model of medical ethics. In support of this 'radically pragmatic venture' the book seeks to combine the theory with the practice of medical ethics by using case studies woven into the text of these historical, philosophical perspectives. In this the author is only partially successful.

The book is said to be aimed at 'all students of medical ethics in philosophy and theology courses as well as medical students and practising physicians'. The author's views of medical students – an American perspective – is of highly intelligent, extremely competitive 'loners' who are perfectionists and workaholics. This may not translate exactly to the British scheme and the philosophical dissertations on the classical texts will be better appreciated by the philosophy and theological students than by their British medical student counterparts. The theories proposed are based on the platonic cardinal virtues of prudence, justice, fortitude and temperance rather than on the more familiar deontological or utilitarian fundamentals of respect for autonomy, beneficence and justice. A detailed exposition using these historical texts is juxtaposed in a seamless narrative with clinical vignettes derived from a Texan hospital in a way that sometimes invokes an 'anachronistic culture shock'. The case studies are provided by a faculty member who is a Ph.D. rather than an M.D. which may account for the relatively minor, though rather frequent and irritating, mistakes in the clinical details. Additionally, many of the ethical dilemmas teased out are related intrinsically to the American Health Care System.

The 'rounding clinical medical ethicist' being called by his beeper to wrestle with problems deriving from the Diagnostic Related Group Prospective Payment System may be a hint of things to come in the UK but as yet makes many of the problems seem remote from ordinary clinical practice. Despite these caveats, a theory is developed from a biological frame via sociobiological and genetic bases ('the morality of the gene') incorporating psychological and social components to provide a 'virtue synthesis' for medical ethical problems. The need for this is encompassed to the author's comment that 'with the rise of classical forms of deontology and utilitarianism a good deal of virtue ethics suffered an eclipse'. This book seeks to remedy this but will be of more relevance and