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 specialized 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