BOOKS RECEIVED

Developments in Biological Standardization Transmissible Spongiform Encephalopathies. Impact on Animal and Human Health

Edited by THE INTERNATIONAL ASSOCIATION OF BIOLOGICAL
STANDARDIZATION. 1993. ISBN 3-8055-5831-7. S Karger,
Basel. Pp. 234. DM 263.00.

Despite its slightly misleading main title, *Developments in biological standardization 80*, this book is the proceedings of an international meeting, held in June, 1992, on transmissible spongiform encephalopathies (TSE).

Groups of papers cover the aetiology, clinical and pathological aspects, epidemiology and diagnostic methods used to study the various TSEs in man and other animals. TSEs are familial, sporadic or acquired. The familial forms are associated with one of a number of mutations in the prion protein (PrP) gene which are inherited as autosomal dominant disorders. Sporadic cases have no disease-related mutation of the gene. Acquired cases are associated with eating contaminated tissues (e.g. Kuru, bovine spongiform encephalopathy, transmissible mink encephalopathy) or are iatrogenic. The case for the PrP as the infective agent is clearly stated and since this meeting has been further strengthened by continuing research. The final parts of the monograph deal with the practical aspects of minimising the risk of acquired TSE—inactivation of scrapie agent, preparation of foodstuffs (gelatine, rendering of meat and bone meal for animal feed), and the safety of pharmaceutical products.

Containing contributions from all the major groups studying TSE and with extensive lists of references, this book must have a place in any department concerned with the spongiform encephalopathies, human and veterinary neuropathology, genetic, pharmaceutical, and food processing. Its high price will probably prevent a more widespread audience, which is a pity for such an important and evolving group of diseases.

J. B. KURTZ

Emerging Viruses

Edited by S. S. MORSE. 1993. ISBN 0-19-507444-0. Oxford University Press. Pp. 317. Hardback £32.50.

The comparison of the life cycle of the mayfly—egg and nymph under water, the emerger developing into the dun, and the short-lived adult stage, the spinner—with the emergence of viral haemorrhagic fevers is one of the finest similes I can recall in the literature of virology. Unfortunately, in other parts of this book, the phrases used by other authors suggests that they never studied the English language.

Emerging viruses is an interesting mixture which attempts to put newly recognised viral diseases into perspective.

Geographic and environmental changes, global warming, agricultural changes, dams and irrigation, urbanisation and increases in population density (human, animal and insect), and travel have brought to notice previously unrecognised viruses.

The potential for viruses to change is another factor in their emergence. Although these changes are recognised only in retrospect, it is important to remember that a single amino-acid change can convert an innocent virus into a lethal strain (Influenza A in chickens). Again, the use of molecular analysis on human and simian immunodeficiency viruses has shown the relatively rapid divergence of these lentiviruses from a hypothetical common ancestor within the last one or two hundred years. Many other examples of emerging viruses are given good coverage including human monkeypox, seal plague virus, Marburg and Ebola, and Hantaan viruses.

As with most multi-author books, there is a variety of styles, but in this book the level at which the various chapters are pitched also differs widely. It is a very interesting book for those already relatively knowledgeable in the subject, not perhaps one to buy but to borrow from the library. I would point the lay reader to *Crisis in the hot zone*, an article in *The New Yorker* (26 October 1992, 58–81) which covers much the same ground.

J. B. KURTZ

Laboratory-Acquired Infections. 3rd. edition

Edited by C. H. COLLINS. 1993. ISBN 0-7506-0642-8. Butterworth-Heinemann Ltd, Oxford. Pp. 274. £35.00.

Medical laboratory workers will be familiar with earlier editions of C. H. Collins' book—the first in 1983 and the second in 1988. The third edition has a considerable amount of revision. All the important surveys on the subject are included and the extensive reference section refers to work published as recently as 1992.

Hepatitis and AIDS are covered under one heading in Chapter 12. Chapter 14, "*Precautions with unconventional agents*", is a single page chapter covering work with prions or so-called slow viruses. Chapter 5, the updated chapter on microbiological safety cabinets, remains essential reading when planning a new or upgraded laboratory.

In general, there is much emphasis on ensuring that the correct equipment is used. Attention is drawn to the fact that many laboratory-acquired infections result from the use of inappropriate equipment, as well as poor laboratory techniques. Infections occur most frequently amongst microbiologists, the group who will mostly read this book. However, as table 1.4 on page 365 indicates, there is a significant risk to staff in other pathology disciplines.

This is an excellent and well-written book by an author of international repute, which should be read widely by all those who work in medical laboratories.

J. BROWN