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,

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 patho-
logical 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 domi-
nant 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
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, prepa-
ration 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 neuro-
pathology, genetic, pharmaceutical, and food processing. Its
high price will probably prevent a more widespread
interest, which is a pity for such an important and evolving
group of diseases.

J. B. KURTZ

Emerging Viruses


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. Unfor-
tunately, 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,
aricultural 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 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


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 tech-
niques. Infections occur most frequently amongst micro-
bio logists, the group who will mostly read this book. However,
as table 14 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