BOOK REVIEWS

Laboratory-acquired Infections: History, Incidence, Causes and Preventions

C. H. COLLINS and D. A. KENNEDY. 1999. ISBN 0-7506-4023-5. Butterworth Heinemann, Oxford. Pp. 324. £45.00.

This is the fourth edition of a book that has always been well received in the past. It has been updated to include recent developments in infections, current European regulations and recommendations, and also includes an extra chapter on the principles and practice of risk assessment. This latest edition has a striking yellow cover which should make it easy to locate on the shelf. Inside there are 19 chapters which cover three broad topics: the infectious hazards involved in laboratory work, control measures needed to contain them and chapters on specific organisms or situations.

The subject matter is covered in great depth with a comprehensive discussion of each topic. However, the user-friendly style of writing makes it a pleasure to read. Much of the book seems to be based on the considerable personal experience of the authors and in consequence it contains a plethora of interesting anecdotes. I particularly liked the story of the man who objected to the design of his building being spoilt by the placing of exhaust ducting from the microbiological safety cabinets on the outside wall. He insisted that the exhaust air was safe to recirculate within the building until it was proposed that it be ducted into his own room. All objections to external exhausting were suddenly dropped.

Tables and diagrams are used extensively throughout the book. They illustrate well some of the complex issues discussed in the text. In these days of evidence-based medicine it is also good to see that references are cited for all the points raised. The bibliography, consisting of 40 pages of closely typed references, is a testament to the thorough research carried out. However, the use of authors' names rather than a numerical system within the text does, tend to interrupt the flow, making some sections difficult to read.

Some chapters deserve particular praise. The discussion on safety cabinets was full of good background data and practical advice which increased my knowledge of the subject. I would also recommend that all new microbiology trainees read the section on 'Equipment and techniques' before their bad habits develop. In this way they should realise why certain practices are encouraged and others forbidden. The new chapter on risk assessment gives a step-wise plan of action and reviews each step extensively. This will serve as a useful guide in a laboratory where there is no experience of this practice. The chapter also includes an interesting section on the hazards that can be associated with hazard prevention.

I was disappointed with the coverage of spillage procedures, especially the fact that there was no advice on how to deal with a room contaminated by tuberculous material. I am sure that this is an oversight, as in general the coverage of this organism was excellent. Two mistakes caught my eye. The name *Stenotrophomonas* was spelt incorrectly both in the text and in the index. More worrying was the use of the antediluvian classification *Staphylococcus albus* instead of coagulase-negative staphylococci.

In summary this book is an extremely useful text for anyone

running a routine or research laboratory. I would recommend that people dipped into it to answer specific questions rather than trying to read it from beginning to end.

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Defense of Mucosal Surfaces: Pathogenesis, Immunity and Vaccines Current Topics in Microbiology and Immunology, volume 236

Edited by J-P. KRAEHEBUHL and M. R. NEUTRA. 1999. ISBN 3-540-64730-9. Springer-Verlag, Berlin. Pp. 296. £107.50.

Mucosal immunology nowadays encompasses an increasingly wide field that includes areas of developmental biology, epithelial cell and molecular biology, molecular and cellular immunology, microbiology, virology and vaccine development. It is appropriate that a text like this brings together each of these strands of knowledge in such a way that it can be appreciated by the experts and non-experts alike. Fourteen presentations are included, e.g., mucosal structure and function covering such topics as the organisation of mucosal lymphoid tissue (W. R. Hein), M cells in antigen sampling in mucosal cells (M. R. Neutra), dendritic cells and Langenhans cells in the uptake of mucosal antigens (G. G. MacPherson and L. M. Liu), epithelial cells in antigen sampling and presentation in mucosal tissues (D. Kaiserlian).

To follow there is a series of articles which include oral tolerance and antipathological vaccines (C. Czerkinsky, J-B. Sun and J. Holmgren), antibody-mediated protection of mucosal surfaces (B. Corthesy and J-P. Kraehenbuhl), effector and regulatory lymphoid cells and cytokines in mucosal sites (T. T. MacDonald) and two articles which address the host-parasite relationship at mucosal sites – bacterial epithelial cell cross-talk (B. Raupach, J. Mecsas, U. Heczko, S. Falkow and B. B. Finlay) and microbial–host interactions at mucosal sites – host response to pathogenic bacteria at mucosal sites (A. Phalipon and P. J. Sansonetti).

The remaining five contributions deal primarily with vaccinology in relation to the mucosal site and cover such topics as host response to respiratory virus infection and immunisation (J. E. Crowe), bacterial toxins as mucosal adjuvants (L. C. Freytag and J. D. Clements), *Vibrio cholerae* as a live attenuated vaccine/vector paradigm (K. Killeen, D. Spriggs and J. Mekalanos), recombinant viruses as vectors for mucosal immunity (C. D. Morrow and colleagues) and plant expression systems for the production of vaccines (J. K-C. Ma and N. D. Vine).

It is clear from the foregoing that the subject area covered in this monograph is expanding with ever more applications of basic biological principles to extend the efficacy of a range of bacterial and viral vaccines. The text extends to almost 300 pages, but illustrations and tables are remarkably scarce. However, what the monograph loses out on tables and figures, it makes up for in literature citations. Each article is well referenced, which should allow the experienced and inexperienced investigator a chance to access the original findings.

This is a text that is full of interesting information on a