Book reviews

Autoimmune Rheumatic Disease. J Morrow, D Isenberg. (Pp 324; £39.50.) Blackwells. 1987. ISBN 0-632-01632-9.

There are now many medium sized rheumatology books, but Drs Morrow and Isenberg have written a good rheumatological overview. They have gone along an immunological pathway, concentrating on the autoimmune aspects of rheumatic diseases. This fills a previous void. They have a deliberately restricted view, and focus predominantly on connective tissue diseases. After setting the immunological scene and outlining immunological methods they journey through the individual diseases. They start with systemic lupus erythematosus, and then progress through rheumatoid arthritis towards the overlap syndromes and systemic vasculitis. I do not consider rheumatoid arthritis or scleroderma as autoimmune diseases, and some of their opinions seem rather too immunological, especially concerning the pathogenesis of connective tissue disorders. Nevertheless, this is an enjoyable and readable account of the rheumatic diseases. It is well illustrated with understandable and topical line drawings. Its tables give up to date summaries. I was also taken with the introductions to each disease showing the milestones in their history.

DL SCOTT

Handbook of Experimental Immunology. Vols 1-4. Vol 1—Immunochemistry; Vol 2—Cellular Immunology; Vol 3—Genetics and Molecular Immunology; Vol 4—Applications of Immunological Methods in Biomedical Sciences. Ed DM Weir. (4 volumes; £180.) Blackwells. ISBN 0-632-01499-7

This is an awesome compilation, a veritable Himalaya of a book spanning the whole vast subject of immunology with secondary ranges running into many satellite kingdoms. *The Encyclopaedia Britannica* apart, there can be few other volumes which would dare to present, let alone succeed in presenting, detailed gene sequences and instructions for wattle grafting within the same work. Some idea of its scope can be conveyed by briefly summarising the contents of the four volumes.

The first volume deals with immunochemistry in all its ramifications. The tyro carrying out elementary antigen-antibody

precipitation assays and the expert seeking maps of the entire immunoglobulin gene complex are equally well served. In guidebook parlance the volume provides breath-taking views of the immunoglobulin molecule's sinuous complexities and the seracs and crevasses of the lymphocyte surface. Yet, for all the formidable concentration of information, the general is set out as clearly and succinctly as the particular. There are splendid diagrams of techniques such as the isolation and characterisation of cell surface antigens and the associations between surface glycoproteins. Indeed, it is a feature of this book that it is not just a series of recipes but also a guide to the knowledge and culture distilled in the methodology. Certainly the clarity and completeness of each author's directions reflects their mastery of this subject but equally the narrative is interspersed with statements about the state of their art equal to any appearing in a purely theoretical or descriptive text. For example, table 39.1 sets out the technicalities of complement assays with an authoritativeness redolent of Sinaic tablets but the narrative in this chapter also portrays the biological essence of the subject in full measure.

The Handbook of Experimental Immunology is much more than a collection of experimental recipes. It is also much more than a compendium of scholarly essays. In fact it represents an attempt to link the world of experimental technologies in immunology with the world of biological concepts at the very margin of advancing knowledge. In the field of lymphocyte responses this is very much what is needed... This is usually the stuff of reviewers' rather than contributors' eulogies. Fortunately, Gustav Nossal's praise of his fellow contributors is fully justified appearing in his overview of lymphocyte responses in the second volume on cellular immunology. This volume is more austere useful but this is just what is needed in a text on a subject so drowned in theorising over the years. This volume includes the essential information in more compact form than other tomes and also ventures into newer areas such as methods for establishing T cell clones. Only in its description of interleukin assays does the volume lag behind the times but only a daily newspaper could serve as a vehicle for disseminating the latest information on this subject.

The third volume boldly plunges into the intricacies of the most recent technology to be introduced into immunology—namely the application of molecular biology and particularly molecular genetics. The Editors have shown great vision in taking practising

molecular biologists into their fold and David Baltimore's introductory chapter is a model of how to introduce scientists in other disciplines to the logic as well as the manipulations of this potentially esoteric craft. Strategies for elucidating the molecular basis of antibody diversity and transplantation immunology are set out as painlessly as any one is ever likely to contrive. It may be that immunologists shedding their inhibitions and beguiled by the lucidity and elegance of this volume may need additional technical guidance. They would properly feel the need for such counsel anyway on intellectual grounds.

The final volume one felt would surely prove too audacious even for an editorial board with this sagacity and enterprise. Such timorous speculation is banished by the precision with which complex technical description is interweaved in a broad canvas of biological and medical applications. The sections which deal with methods for raising and characterising monoclonal antibodies are just as good as the many texts dealing exclusively with these matters. It is also felicitous that one can proceed straight from general descriptions to, for example, a precise and detailed tabulation of the antigens expressed by macrophages which can be detected by monoclonal antibodies. Similarly, the chapters dealing with "clinical immunology" fully expound the principles and applications of the laboratory techniques immediately relevant to the diagnosis and management of clinical problems. These contributions are as informative in these areas as many voluminous texts on this subject but are not superfluously padded out with clinical and pathological descriptions more properly belonging to textbooks of medicine. Any example would illustrate the point but one can cite the chapter on immune complexes which soberly and accurately sets out the practical steps and applications of the methods in a field so often clouded by half truths and over interpretation.

The first test of a book such as this is its usefulness as a source of methods. It would take a panel of expert referees commensurate with the numbers of contributors to produce a truly informed answer but one's own experience and that culled from immediate colleagues enthusiastically endorse the book on this score. It is a bonus but not a prerequisite for a technical handbook to be interesting and culturally informative. Even shorn of descriptive methodology, these volumes would hold their own in competition with most standard textbooks of immunology both basic and applied. The inter-