

significant proportion of associated tumours, confirming that this is indeed the causative gene. This provides a fitting climax to a subject that has had a relatively short incubation time but has already generated a large body of existing results.

ALAN WRIGHT

Human Immunogenetics. Basic Principles and Clinical Relevance. Immunology series volume 43. Ed S D Litwin. (Pp 856; \$180.00.) New York: Marcel Dekker, 1989.

This book is a multi-authored volume, comprising a total of 32 chapters which are distributed between five sections: an introductory section which focuses on the experimental approaches and tools of immunogenetics (the reader is assumed to be already familiar with basic concepts in genetics and immunology) and one section each to cover the immunogenetics of immunity, histocompatibility, tumour and viral antigens, and blood and serum components. Clinical applications are discussed at various stages in the book and individual chapters are devoted to immunodeficiency and to HLA and disease. The stated intention is that this book should be suitable for "advanced undergraduate, graduate and medical students in immunology, genetics, microbiology, cell biology, or pathology as well as a reference for clinicians and researchers in these disciplines and virology, hematology, allergy, infectious diseases, and oncology". However, the volume suffers from a number of drawbacks. First, the balance of the book is oddly tipped towards the immunogenetics of tumour and viral antigens (205 pages) while some mainstream topics are given scant consideration, for example, the marvellous progress that has recently been made in defining T cell receptors has largely been overlooked. Secondly, a great deal of the text is out of date with only a very small number of the 2500 references referring to material published more recently than 1986. As a consequence some of the information provided is factually incorrect. Although some chapters are both authoritative and lucid (for example, the review on immunoglobulin genes), many others fall short

of this standard. Overall there is the impression that the book is not a very coherent sum of its individual components and there are many instances of unnecessary repetition and occasional inconsistencies between chapters (for example, in relation to surface marker nomenclature). However, with a total of 48 authors, it is perhaps not altogether surprising that the book is very uneven regarding the content and style of individual chapters. While it is to be hoped that such deficiencies may be remedied in future editions of this volume, the content of the present book does not compare favourably with that of several existing books which deal with more specific aspects of human immunogenetics and have been written by one or two authors, for example, *Molecular immunology*, edited by Hames and Glover (IRL Press, 1988) and *The natural history of the major histocompatibility complex* by Klein (John Wiley, 1986). In the fast evolving field of human immunogenetics there remains a need for a single definitive textbook that is both wide ranging and up to date.

T STRACHAN

Human Chromosomes—Manual of Basic Techniques. Ed Ram S Verma, Arvind Babu. (Pp 240; £15.95 paperback.) New York: Pergamon Press, 1989.

The authors claim that this book is primarily written for those in the field of human cytogenetics who wish to improve their laboratory skills. It is more than that, providing not only detailed protocols but also the essential theoretical background to the methods used. The text covers the various approaches to culture of a comprehensive range of specimens, all of the commonly used banding techniques (as well as a very interesting review of the use of restriction enzyme/Giemsa banding), in situ hybridisation, and a chapter on DNA isolation, probe production, and Southern blotting. The book is excellently illustrated and the extensive reference sections at the end of each chapter provide a rich source for further reading.

The style of the book, as with most laboratory manuals of this type, could not be described as bed time reading, but it has a logical and well structured

format. At times the authors are rather dogmatic, especially in their comments on analysis, where they impose arbitrary values on the number of cells they consider essential for diagnosis. Safety in the laboratory is not well dealt with; one comment on the essential need for a gas burner in a laminar flow hood would not only be considered bad practice in the UK, but is potentially dangerous. It was a surprise to find that high resolution banding was considered to be a specialised technique and did not appear in the main culture methods section; most cytogeneticists would now consider this to be a routine laboratory method. Perhaps the major omission is the lack of non-radioactive in situ hybridisation techniques which, although the authors consider them to be of great interest, are given no more than a cursory paragraph. Perhaps developments in this field will be included in the next edition. These are minor criticisms of an excellent reference work which should be on the bench of all clinical cytogenetics laboratories. It will be a welcome source of information for cytogeneticists already in the field and essential reading for those in training.

No one can say that clinical cytogenetics is not evolving when they read the wide range of techniques available, so well presented in this book.

TONY ANDREWS

The Selfish Gene. Richard Dawkins. 2nd ed. (Pp 352; £17.50 hardback, £5.95 paperback.) Oxford: Oxford University Press, 1989.

Who has not read Richard Dawkins's *The selfish gene* since it first appeared in 1976? Most biologists are now familiar with his idea of the gene as a survival machine, a sort of mindless and blind replicator only concerned with its survival through natural selection. This new edition is bigger with more than double the number of references, and includes two additional chapters: 'Nice guys finish first' based on a television programme, and 'The long reach of the gene' based on his *The extended phenotype* (Oxford: Freeman, 1982). According to *The New York Times* this is "... the sort of popular science writing that makes the reader feel like a genius". It is thus comparable