to the aetiology of the disease is evident. During the 1980s, the advent of recombinant DNA technology has enabled both molecular biologists and geneticists to come to prominence in the field of atherosclerosis research. The identification and characterisation of the genetic determinants of susceptibility to develop atherosclerosis is obviously an attractive clinical goal. Not only would it provide insights into the molecular and cellular mechanisms responsible for the disease, it may also result in a refinement of risk assessment for an individual patient.

This monograph primarily gives an overview of the 'state of play' of current research in this field with a particular emphasis on the genes encoding for both the apolipoproteins and their receptors. This is a fast moving field and there is an inevitable lag of approximately 12 months between starting a contribution and its publication in monograph form. However, there are contributions from distinguished workers from both sides of the Atlantic. The first chapter is by Angelo Scarnà and is an authoritative precis of the clinical aspects of hyperlipidaemia. This is followed by a discussion of the statistical approaches to identifying major loci for disease susceptibility and thereafter a chapter on the organisation of genes involved in lipid metabolism and their chromosome localisation.

The ensuing two chapters are written by David Galton (London) and Phillipe Frossard (Stanford, California) and give an up to date precis of current knowledge regarding candidate genes and their ability to predict genetic susceptibility to atherosclerosis. The remaining four chapters extend this approach to animal models including the Watanabe rabbit, the pig, the mouse, and the non-human primate models.

Despite an irritating number of typographical errors, I would recommend this book for anyone interested in the field of atherosclerosis in order to avail themselves of a general overview of the contribution of molecular biology to this field of study. The style and presentation of the book is attractive and clear and indeed would be suitable reading material for scientists of diverse disciplines, and a welcome addition to a departmental library.

A REES


This is volume 20 in the series entitled 'Methods in Haematology', which sets out to familiarise the reader, who presumably is a student of molecular haematology, with the fundamental principles and instructions to carry out the manipulations required. The book is organised into 13 chapters dealing with an introduction to DNA and the genetic code in the first chapter through to introducing genes into cells in the final part. Each of the chapters has been written by different authors who are well recognised in the field. On the whole, this volume is clearly written and the protocols are easy to follow. Apart from an important typographical error in the section dealing with Southern blots, where a weight of some 500 kg would upset most gels, the instructions are 'user friendly'. The book not only covers everything that the Molecular Cloning Manual does, which is in use in most laboratories, but extends the methods to include more contemporary techniques such as in situ hybridisation, in vitro translation systems, site directed mutagenesis, oligonucleotide design and usage, and DNA mediated gene transfer. The sections covering protein analysis are welcome for those entrenched in traditional nucleic acids backgrounds.

The chapter describing the use of antibodies as a method for screening cDNA libraries constructed in bacteriophage lambda gt11 is well described. Sadly, the authors dealing with introducing genes into mammalian cells did not give retroviral gene transfer a similar treatment. As this method is the most efficient and is the one currently being developed for gene therapy, some description of the principles involved would not have been beyond the scope of this book. A chapter on transgenic mice would also have been valuable.

Unlike the majority of other volumes in this series, this issue is applicable to any discipline requiring molecular biology techniques and is not restricted to haematology. However, like all potential textbooks, it is inevitably out of date as soon as it is published. The most innovative amplification techniques of polymerase chain reaction (PCR) were omitted, presumably because this volume was in press as PCR was in its infancy. However, with the advent of PCR a large number of these protocols will have to be rewritten. Nevertheless, as an introduction to some of the basic molecular techniques, this is a valuable addition to the literature. It is concisely written, with an extensive reference list and glossary of terms, and is well illustrated. As a slim volume, not bad for a start.

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