which also contains strong caveats and useful pointers to future research. Where possible, it would be helpful if a similar style and balance were to be used throughout the next sister volume, which we may hope to see less than a decade, given the rapid growth in this field.

JENNY BARN


During recent years, the field of gene therapy has evolved into an area of intense research. Investigations in the field cover a wide range of disciplines into delivery vehicles (involving chemical, biochemical, and virological studies), administration of genetic material, as well as elucidating the genetic causes of disease. Publications such as "Gene Therapy Protocols" are invaluable, bringing together information from an extremely wide source of reference in one volume. In addition it presents up to date protocols used in gene therapeutic approaches and includes useful notes and background information on the subject.

The title of the book implies that it is simply a collection of methods used for gene transfer, with individual chapter headings being somewhat deceptive. One could be for thinking how, for example, "Methods for targeted gene transfer to liver using DNA-protein complexes" (chapter 10) would be applicable to other areas. Indeed, though this chapter concentrates its information on the subject in the title, the techniques outlined are available to modification for other applications.

The content matter of the book is impressive. There are representative chapters for almost all aspects of current research in gene therapy, including generation of vectors, vector delivery (ex vivo and in vivo), and cancer gene therapy. Additionally, there are details regarding histological examination of tissues, cell biology, and cancer genetics.

The notes sections at the end of each chapter can be particularly useful. Contained in these sections are details regarding the parameters which it is necessary to consider for optimisation of the systems. For example, a note at the end of chapter 8 ("Methods for liposome-mediated gene transfer to the arterial wall") outlines the necessity of altering the DNA-lipid ratio for each cell line and each lipid formulation. While this may be obvious to some readers, it may be of great relevance to others.

It is difficult to suggest who the book would be most suitable for. To the casual reader or student, it may appear difficult reading, but sufficient background information is contained to maintain their interest. Similarly, to the researcher in the field, some areas may appear tedious, but again the ample detail should keep their attention.

In summary this book is a valuable addition to a library or laboratory involved in gene therapy research and should be read by a significant cross section of students and academics owing to both the wide breadth and detailed nature of the information contained.

JEFF DREW

GEORGE DICKSON