

Gene therapy

'Gene therapy: the use of DNA as a drug', edited by Gavin Brooks. Pp xix+328. Price £29.95. London: Pharmaceutical Press; 2002. ISBN 0 85369 455 9.

The complete sequencing and ongoing efforts to annotate the human genome will ultimately yield the so-called "periodic table of life" whereby the sequence and function of every single gene in the human body will be known. Thus, the concept of treating diseases that result from genetic abnormalities by the addition or replacement of specific genes holds great promise for future health care. However, over 300 clinical studies spanning over more than a decade have led to limited success for gene therapy; a fact that has surprised many of the scientists involved in this area. This excellent book, edited by Gavin Brooks, provides a summary of the pros and cons of gene therapy approaches for treating cancer, cardiovascular diseases, AIDS and other infectious diseases, rheumatoid arthritis and neurological disorders. There are also valuable chapters focusing on DNA structure and regulation, the problems of gene delivery and an overview of the Human Genome Project.

A particular strength of the book is the simple, easy-to-read introductions to each of the clinical applications that will appeal to undergraduates and newcomers to the field.

The book concludes, rather surprisingly, with a chapter discussing the advantages and disadvantages of tissue and organ xenotransplantation — a subject not normally considered as gene therapy. Though the book tries to argue that transplantation of cells also involves transfer of genetic material, it is clearly a secondary consequence and not a primary purpose. A chapter discussing other genetic therapies such as antisense oligonucleotide, ribozyme and DNazymes may have been more preferable.

In summary, Dr Brooks has produced a well-edited book that serves as a valuable

addition to the literature. I highly recommend it to those interested in understanding the fundamentals of gene therapy and some of the disease states for which it is currently being applied in clinical studies.

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Health information on the internet

'The patient's internet handbook', by Robert Kiley and Elizabeth Graham. Pp xiv+302. Price £9.95. London: The Royal Society of Medicine Press Ltd; 2001. ISBN 1 85315 498 9.

Locating high quality and relevant health information on the internet is not a trivial matter, even for the experienced internet user (it is estimated that there are over seven million websites on the internet). This well researched book is a guide to locating and evaluating health information on the internet, and also provides a directory of resources for many common conditions. The authors aim to encourage patients to become informed about their health, supporting the philosophy of patient empowerment and self-accreditation of health information, in partnership with health care professionals.

The book comprises 13 chapters, presented in five sections. The first section includes an overview of the book and a beginners guide to the internet. Although this is aimed at new users, experienced users will find useful tips on security and filtering. It provides information on how to connect to the internet and guidance on how to use e-mail and a web browser.

The second section gives general advice on searching for health information on the internet using tools such as search engines, web directories and evaluated subject gateways. Access to various medical databases such as Medline and the Cochrane Database is discussed. Discussion lists and newsgroups are also considered as forums for exchanging information with people having common interests. Although use of discussion forums is

encouraged, emphasis is placed on the caution required when using these resources.

The third section considers the range of information health consumers can obtain via the internet. The extensive range of information provided by the National Health Service is discussed, including performance data and tools for locating health professionals. Key drug information, and complementary and alternative medicine resources are considered. Advice on the use of online pharmacies is also provided. The final chapter of this section considers resources pertaining to pregnancy, childbirth and infant care.

The fourth section of the book discusses the quality of health information on the internet and encourages a healthy scepticism. Advice is given on how to avoid dubious websites and guidelines are provided on how to evaluate medical information. Patients are also advised how they should use information they have obtained from the internet in consultation with their health professional. The final chapter in the section considers future roles of the internet in the delivery of health care.

The fifth section is a directory of internet resources for 100 medical conditions. The section is a useful reference source and many readers will use it simply to locate information resources on specific conditions. The links are predominantly for United Kingdom-based sites, however there are many excellent non-UK sites and perhaps a separate section for these sites could be included in a future edition.

The book has an accompanying website (www.patient-handbook.co.uk) that contains corrections and updates (certain information is already out of date, however this is inevitable given the rate at which the internet is developing). The website also offers the opportunity for subscribers to receive monthly bulletins on useful sites and reports. The bulletins are particularly useful for health professionals. The book would have benefited from greater use of the accompanying website, in particular, the availability to subscribers of an up-to-date version of Section 5 (links to sources of information).

The book is well written and a valuable resource for both patients and health professionals. Patients are increasingly challenging pharmacists with information they have found on the internet. This is an essential reference source for pharmacists. It will assist in both the location of reliable sources of health information, and also in educating and assisting patients to evaluate health information on the internet.

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THIS WEEK'S REVIEWERS

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