

Book reviews

Introduction to Radiobiology

M Tubiana, J Dutreix and
A Wambersie (Editors)

371 pp. and 163 figs.

ISBN 0-85066-745-3;

hardback price: £50.

ISBN 0-85066-763-1;

paperback price: £19.

Introduction to Radiobiology is a translation of the French textbook *Radiobiologie*, 1st Edition (1986). This first English edition of August 1990 was translated by DK Bewley (MRC Cyclotron Unit, London, UK) and has been thoroughly revised.

It is a basic textbook on radiobiology, and provides a clear view of daily practice in radiotherapy. As Hall's standard work has already had its third printing, it would seem that there is no direct need for yet another textbook. However, important recent developments in radiobiology are not dealt with extensively in Hall's book, whereas they are in this new book.

Quite a number of pages have been reserved to deal with different 'target' and 'repair' models for the description of 'cell survival curves' in single-dose radiation. Table 4.3 is particularly illuminating, because a number of experimental results are explained in completely different ways by two alternative models. To put things into perspective, the authors add: "Regardless of any hypothesis about the mechanisms of cell death, it is convenient to represent cell survival curves by a simple expression. . .". This lays the basis for the correct handling of the generally used terms ' α/β ' and 'LQ-model'. The extremely antiquated—but often still proclaimed—view that the quadratic component of cell death is the result of two hits on the same 'target' by two different ionization tracks, is not only discarded but the authors also demonstrate why this idea is clearly incorrect.

The chapter on fractionation and treatment time in radiotherapy offers many practical pointers and is much more accessible than the rather unstructured book by Thames and Hendry from 1987. The references at the end of each chapter are up to date and extensive enough to serve as starting points for further study.

A minor imperfection is that the Index at the end of the book consists of only two pages.

In conclusion, this book is a good and modern alternative for the classical work of Hall, in serving as a textbook for radiobiology. It is especially useful for radiotherapists in training, students in radiobiology, and certainly also for radiotherapists and physicists who want to be able to join radiobiologists in an effort to solve clinical problems.

For other readers, this book will also provide a good introduction into many aspects of radiology and its clinical application.

RE Beekman

Important Advances in Oncology

VT DeVita, S Hellman and
SA Rosenberg (Editors)

288 pp. with 78 figs.

Philadelphia: JB Lippincott.

ISBN 0-397-51156-6.

Price: approx. \$90.

Cancer Principles and Practices of Oncology by DeVita, Hellman and Rosenberg is considered a standard work in oncology. The present book can be seen as a welcome addition, containing a selection of the most recent developments in oncology. Every year such an issue appears so that the combination of *Cancer Principles and Practice of Oncology* and this book provides a complete and up to date review of oncology.

The book consists of two separate parts, both of which are written almost completely by American authors. The first part deals with a selection of developments in basic research, including oncogenes, drug resistance, radiation resistance and genetic predisposition for cancer.

The second part deals with recent clinical developments in cancer treatment, such as new radiological techniques in imaging of pelvic malignancies, autologous bone marrow transplantation in the treatment of breast cancer patients, three-dimensional radiotherapy techniques, neoadjuvant chemotherapy with T3,4 larynx carcinomas, and the use of growth factors in cancer treatment.

The book is recommended for libraries and readers interested in these areas of oncology.

M Heesters

Papilloma Viruses and Human Cancer.

K Syrjänen, L Gissmann and
LG Koss (Editors)

Berlin, Heidelberg: Springer-Verlag.
1991.

ISBN 3-540-16341-7.

Price: DM169.

This book was written to bridge the gulf which exists between research workers from different disciplines studying papilloma viruses. It describes histopathological, clinical and fundamental virological aspects of papilloma virus infections. The book, mainly arranged as an inventory, concentrates on the presence of different human papilloma types (HPV) in cutaneous, oral, respiratory and anogenital epithelial lesions (benign, malignant or dysplastic).

The splendid chapter on the relationship between HPV and cervical carcinoma deserves special mention. This chapter is written by the renowned pathologist Leopold Koss, who has formulated the state of the art of this field in a very careful manner. He dares to take a strong position when discussing the clinical implications of an HPV infection in cervical smears, i.e. that additional colposcopic examination should be carried out in patients with normal cytology.

The chapters on immune responses and the treatment of papilloma virus-induced lesions clearly show how fragmentary and preliminary our knowledge still is about this group of interesting viruses.

Because there is no suitable *in vitro* cell culture system for human papilloma viruses, it comes as no surprise that only three of the 17 chapters of the book are devoted to fundamental aspects such as viral transcription, cellular transformation and HPV integration in the cellular genome.

The lucid formulation of diverse problems, especially in these last chapters, makes the book suitable for the critical papilloma research worker beginning with a background in clinical or molecular biology. The almost complete and clearly written information makes the book also a useful source of information for pathologists and gynecologists.

JMM Walboomers