INDER M VERMA BOOK REVIEW

Just an appetizer

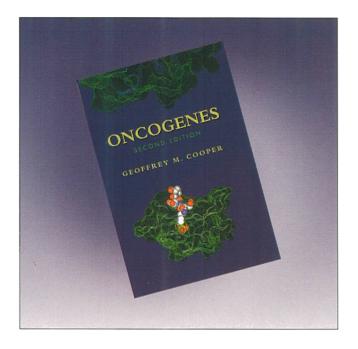
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Oncogenes by Geoffrey M Cooper. Jones and Bartlett, 1995, 384 pages. \$53.75 hardcover (ISBN 0-86720-937-2).

Reading Geoffrey Cooper's second edition of *Oncogenes* is like going to a gourmet Italian restaurant with an elaborate menu, but where the waiter stops serving after you have sampled a few appetizers. To get a full meal you must go elsewhere. Five years and perhaps 5000 articles ago the first edition of *Oncogenes* was published. In the ensuing years there has been an explosion of knowledge in the general area of signal transduction, where oncogenes are only one of the many players.

This 384-page book is divided into twenty chapters, which include introductory chapters on the cancer cell, DNA tumor viruses, retroviruses, oncogenes, suppressor genes, chromosomal abnormalities and clinical applications. Each chapter is followed by references which often include a number of original publications and informative reviews. Each chapter also includes a number of clearly drawn and well explained illustrations. All the important and seminal findings in the last two decades are covered; the overall credit attributed to various researchers for the key discoveries is fair and generally accepted in the scientific community. Naturally, in such an abridged version of this vast field, the inclusion or exclusion of various findings is very subjective. For instance, in chapters 9 and 10 in part III of the book, dealing with the discovery and function of tumor suppressor genes, I would have emphasized the findings of Ed Harlow and colleagues on the interactions of adenoviral E1A and retinoblastoma (RB) proteins. This was the first inkling of the crucial link between growth promoters and growth inhibitors. There is also room for more updating of certain dogmas, for example, the model for regulation of NF-kB (Fig. 16.9) is a bit outdated. Despite some minor blemishes, however, Cooper has admirably managed to capture the principal findings of a voluminous and fast moving field.

Who will be best served by reading this book? Clearly undergraduates interested in cancer, the cell cycle, signal transduction and so forth will find this book



useful as a guide and a launching pad. Unfortunately, it is too skimpy in details to be useful for a serious graduate student. Although medical students are certainly interested in the topic (as is evident from the fact that many participated in my reading group on oncogenes at UCSD Medical School), I don't see how they will have much use for this book. It will certainly be beneficial for teaching, because its organization is excellent and it contains many seminal references. Since the book is designed as an introduction, it would have been useful to tabulate all the known oncogenes, growth factors, cell cycle genes, suppressor genes and so forth in chart form with a sprinkling of their major characteristics and biological functions.

Finally, Cooper's style of writing is simple, direct and parsimonious. I quite enjoyed the hurried tour of the fabulous land of oncogenes on its 20th anniversary.

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