Cancer: Science and Society

by John Cairns
W. H. Freeman; San Francisco, 1978
xiv + 200 pages. £2.90 (softcover), £6.20 (hardcover)

The subject of cancer is not only one affecting the lives of many; it is also one in which a large number of biological and medical scientists are involved in some manner or other. This outstanding book has as its aim the education of both the interested lay public and students in the biomedical sciences in the current knowledge and status of non-clinical cancer research. This reviewer would add to this list of potential readers the many workers actually involved in some aspect of cancer research. It is such a diverse and multi-faceted set of disciplines that a unifying, readily readable text such as this performs the valuable function of reminding one of the depth and complexity of the cancer problem.

Many historical, cellular, viral, molecular biological (and particularly) epidemiological aspects of the subject are covered by Cairns. He has attempted to provide some basic background material (for example, on molecular genetics) to aid readers deficient in such areas, although even with such help the lay people shown the book by this reviewer found the more 'scientific' parts of the book by no means a straightforward read. The scientific reader will find the extensive bibliography of much use.

The brief, though non-trivial treatment of what Cairns terms 'experimental cancer research', is confined to two chapters, one concerned with essentially (molecular) aspects of carcinogenesis and the other primarily with the transformed cell. Some would perhaps quarrel with over-emphasis of some topics and omission of others (such as fundamental cancer chemotherapy), but overall Cairns has achieved a satisfactory balance.

Probably the most interesting, and certainly the most controversial aspects of this book are those dealing with the 'social science' of cancer, where Cairns is not afraid to venture his own opinions, especially on topics such as the effectiveness or otherwise of public mass screening tests for certain forms of cancer. He is perhaps unduly pessimistic about improved prospects for treatment and rather too dismissive of the undoubted improvements in, for example, chemotherapy. The book closes with what amounts to a clarion call for cancer research to follow the straight and narrow path of the cell and molecular biologist. It is rightly cautious in being hesitant about pointing out new directions in cancer research.

The non-aloof style of the book, combined with Cairn's knowledge, authority and sense of perspective make it a genuine pleasure to read. It can be thoroughly recommended to a wide audience.

S. Neidle

Surfaces of Normal and Malignant Cells

Edited by R. O. Hynes Wiley; Chichester, 1979 471 pages. £24.00

This is a well-produced book that is effectively in two parts. Eight of the twelve chapters are concerned with comparisons between the surfaces of normal and malignant cells. This first section covers cell morphology, glycolipids, proteins and glycoproteins, mucopolysaccharides, surface membrane enzymes, proteolytic enzymes, and the immune response to C-type virus-induced tumours. According to the preface,