(Cultivar Oh43) and sea urchin (Paracentrotus lividus) and too little effort is being made to analyse (rather than simply describe) the response in tractable experimental systems (such as the yeasts). For this reason this book will be of great interest to workers in the field but of limited value to others. Apart from the rather detailed nature of most of the contributions the editors have done a disservice to their wider public by omitting an overview, either a rather general introductory chapter or a summary, identifying the high lights and broad issues (for these readers must turn to Elizabeth Craig’s recent review in ‘Critical Reviews of Biochemistry’ (18:239) or await Susan Lindquist’s review in the forthcoming ‘Annual Review of Biochemistry’. The result is that the non-specialist must read a great deal of detail, that he never needs to know (one suspects much of it to be ephemeral) to get a general feel for the state of the art. This is a pity.

Michael Ashburner

Viruses and Cancer

Society for General Microbiology, Symposium 37

Edited by P.W.J. Rigby and N.M. Wilkie

Cambridge University Press; Cambridge, 1985

323 pages. £32.50, $64.50

A meeting held at Warwick University in England in April 1985 formed the basis for this book. Each chapter corresponds to one of the major speakers at the symposium and between them they cover most cancer related viruses. It is in some ways refreshing to have a book which concentrates on those viruses actually involved in real cancer rather than the endless detail of SV40 biology to which we have become accustomed in DNA tumour virus books.

With fourteen chapters all written by different authors, there is bound to be a degree of unevenness in subject treatment. Some chapters are detailed reviews of the minutiae of gene expression while others take a wider view of the virus-cancer relationship. It is the detailed ones which make the book a useful reference source but it is the others which make it readable. This, I thought, was the main quality. I suppose that the Cold Spring Harbor books on tumour viruses set the standard by which others are judged in this area of biology.

Whilst the Cold Spring Harbor books are more authoritative than this symposium volume, at least I felt sufficiently interested to actually read this one rather than just look things up in it.

The book covers hepatitis B, bovine and human papillomaviruses, adenovirus, mouse mammary tumour virus, bovine and feline leukaemia viruses, Epstein-Barr virus and human T cell leukaemia (lymphotropic) virus. There is also a rather sporadic coverage of oncogenes including a chapter specifically on the ras family.

I think this would be an excellent library purchase. Bearing in mind that it will have a rather short lifespan before it is out-of-date, it is too expensive for the private purchaser. In spite of its title and a valiant effort in the opening chapter, the prospective purchaser should be warned that it is really a book about viruses rather than about cancer.

Paul Farrell
Viruses typically initiate cancer development by suppressing the host's immune system, causing inflammation over a long period of time, or by altering host genes. Cancer cells have characteristics that differ from normal cells, such as acquiring the ability to grow uncontrollably. This can result from having control of their own growth signals, losing sensitivity to anti-growth signals, and losing the ability to undergo apoptosis, or programmed cell death. Cancer cells don't experience biological aging, and maintain their ability to undergo cell division and growth.