common to all countries, and the role of legislators and the public in providing judgments of how to control risks to an acceptable level in a particular community. In the first section, on smoking, the techniques required to influence public opinion and reduce the risk of smoking in France and Finland are outlined. Although it is generally accepted that the public should have a major say in deciding the acceptability of risks, the paradox presented by a government deciding to legislate on smoking and then attempting to influence public opinion to support it is not tackled.

The international repercussions of legislation in this field are well illustrated by the chapter on control of aflatoxin. The close control imposed by importing countries on aflatoxin in peanuts has a dramatic effect on the economy and health of those whose country depends on peanut production. The interval between suspicion of a carcinogenic risk and final control of exposure can be very long, as is illustrated by examples of asbestos, 2-naphthylamine and vinyl chloride. The problems of thresholds in carcinogenesis and of comparison between chemical carcinogens and radiation are also discussed.

If the reader is expecting clear indications of how to proceed in legislative or practical control strategies, he will be disappointed, because clarity is not yet present. To the anglophile, the pragmatic but effective control of occupational exposure by the UK government is heartening. The highlight of the conference is in the well-balanced and objective contribution by Dr Higginson in the introduction, and Professor Doll in the summing-up. To those interested in the field, an incentive to read this volume comes from 2 quotations from Higginson:

"It should not be forgotten that complex biological processes are not basically altered by legislation or legal definition, however rational", and "I do not believe that the cause of cancer prevention is served by acrimonious adversary tactics and attempts to denigrate the integrity of colleagues."

In general it is an interesting, if somewhat superficial, look at the problems posed by legislation and control of carcinogens. It will be of particular value to scientists who do not normally work in this field, because it gives them an insight into the complexity of the issues which have to be tackled.

I. F. H. PURCHASE

Tumor Associated Antigens and Their Specific Immune Response. Eds F. SPREAFICO and R. ARNON (1979). London: Academic Press. 359 pp. £15.00, \$31.00.

This book presents the proceedings of a meeting in Milan in the summer of 1977 and covers a wide range of topics in tumour immunology. The list of contributors is impressive, and several of the papers presented give a valuable review of work in progress in different laboratories. The major themes discussed are antigen expression on virally and chemically induced tumours (Comoglio, Baldwin, Parmiani); activation of T-cell cytotoxic mechanisms (Berke, Alexander, Collavo, Keder, Scherter); natural immunity against animal and human tumours (Herberman, Haller, Forni, Della Porta) and studies of antigen expression and immunocompetence in cancer patients (Thompson, Adler, Stein). Consideration is also given to the effects of drug treatments on antigenicity and immunocompetence in animals (Mantovani, Bonmassar) and to the possible use of xenoantiseria in therapy (Arnon and Davies).

The book offers an attractive collection of papers on major areas in tumour immunity by recognized authorities. The papers are generally critical and seek to subject the field to the close scrutiny that is necessary if it is to flourish. The extensive reference lists of each contribution are also useful. This book is to be recommended, though it is probable that all the papers have now appeared in the journal literature, as might be expected 2 years after the conference. To have them combined in this form is a realistic addition to any worker's bookshelf.

B. M. VOSE

Atlas of Clinical Cytology. P. LOPES CARDOZO (1979). The Netherlands: Heine-mann. 732 pp. £75.00.

This is an unusual book in that it presents the accumulated experience of one man over a period of more than 25 years. In the first chapter Dr Lopes Cardozo states his basic philosophy of clinical cytology, detailing the diagnostic range of cytological techniques; this would be useful reading for clinicians as well as cytologists. The second chapter, on criteria of malignancy, needs careful study to appreciate the remainder of the atlas, par-

ticularly for those who are more accustomed to Papanicolaou-stained material. Dr Cardozo has always been a foremost advocate of the use of Giemsa stain for cytological preparations, and most of the examples in the Atlas are stained in this way. In this country Papanicolaou's stain is in general use, even when a Romanowski stain is also used for some types of material. This difficulty should not deter potential readers, who may find themselves recognizing areas in which Giemsa improves diagnostic accuracy.

The Atlas is profusely illustrated, with a wide range of examples of benign and malignant lesions, including a number of rare conditions. The list of contents is detailed and refers to the plates illustrating each condition, making this a valuable bench book for reference for those who use Giemsa stain; some special stains are also illustrated. To include 3300 coloured plates it has been necessary to sacrifice the size of the pictures, but this can be overcome by following the author's advice and using a magnifying glass.

E. B. BUTLER

Pulmonary Metastasis. Eds L. WEISS and H. A. GILBERT (1978). Boston: G. K. Hall & Co. 336 pp. \$34.50 (+15% outside US).

This book is the first of a projected series of texts devoted to metastases at specific sites. The first section deals with basic mechanisms and pathways, and covers topics such as the detachment of tumour cells, their arrest in the circulation, models for micro-metastases, and metastasis as an expression of inherent tumour-cell heterogeneity. The second part is concerned with patterns of pulmonary metastasis viewed largely from a pathological angle. The third section deals with growth kinetics and the clinical management of pulmonary metastases with particular reference to surgery and radiotherapy.

This bare outline indicates some general characteristics of the book. The reader will find an eclectic approach to pulmonary metastasis, in which both clinical and experimental aspects are skilfully presented. The book provides an authoritative source of recent work, and most readers will find a lot of new material, as well as familiar material set in new and interesting contexts. Certain chapters are controversial, and the strong emphasis on surgery is likely to provoke dis-

cussion. Curiously little is said about palliative treatment for pulmonary metastases.

Some of the contributions are a little repetitive but, in general, this multidisciplinary approach to metastasis at one particular site has yielded an outstandingly useful and interesting book. Its successors in the series will be eagerly awaited.

R. L. CARTER

Mitomycin C. Current Status and Developments. Eds S. K. CARTER and S. T. CROOKE (1979). New York, San Francisco, London: Academic Press. 254 pp. \$20.00.

In his concluding remarks to this excellent survey of the antitumour action of Mitomycin C, Dr Carter points out that "an old drug can always have a new lease of life". This agent was recognized as an antitumour agent in the late fifties and a considerable effort, especially by Japanese investigators, has contributed to a detailed knowledge of its mechanism of action, to a programme of synthesizing analogues and to the clinical testing both as single agents and in combination with others. This volume seeks to review all these aspects in some detail.

The interesting opening chapter of S. T. Crooke, entitled "Mitomycin C: An overview" details its discovery and properties. This is followed by a detailed and well written account of the basic work that has been undertaken to elucidate the mode of this drug, by J. W. Lown. This chapter is an invaluable component of the book, in that the requirements for antitumour action in this series of analogues have been concisely and clearly documented and discussed at the molecular level. The specialized multi-pronged activity of the agent, involving alkylation, cross-linking, hydroxyl radical formation and its pH dependency are all shown to be critically important to the quality of its antitumour activity. Analogue development is discussed by W. A. Remers, together with their *in vivo* evaluation by W. T. Bradner. This included some interesting data on toxicity, especially in relation to cisPDD. Ultrastructural changes due to Mitomycin C are outlined by Y. Daskal and S. T. Crooke, but the quality of the plates of transmission electron microscopy is not quite good enough to discern the nucleolar segregation alluded to. A short and interesting