The biologist will be confused on the histological threshold criteria used to diagnose malignancy in colonic adenomas. For severe dysplasia invading the mucosal connective tissue but not the muscularis mucosae 'the most accurate descriptive term is "intramucosal carcinoma"'. But 'To prevent confusion the term "intramucosal carcinoma" is best avoided in the colon.' The authors believe, perhaps correctly, that metastasis of these lesions occurs by lymphatic channels only, that there are none in colonic mucosa and that reporting 'carcinoma' may lead to unnecessary radical surgery. In consequence suspicious, superficially invasive lesions will be lumped with the benign for analysis, and possible variations in risk lost.

Two points will particularly interest those working with human material. A single prognostic term can cover different cytological abnormalities (e.g. severe dysplasia in Figures 122, 128 and 132), and carcinoma arises in other conditions, whose cause is often unknown. Are either relevant to the variety of oncogenes reported?

But perhaps the biologist will be most thoughtful considering hazards in diagnosis: apparent dysplasia or pseudoinvasion due to inflammation or radiation. Would he make a decision with such risks?

C. Rowlett

Endocrine Tumours: The Pathobiology of Regulatory Peptide-Producing Tumours. By: J.M. POLAK & S.R. BLOOM. Churchill Livingstone, xi+288 pp, 1985, £35.00. ISBN 0 443 02979 2.

As one who studied pathology in an era when the glandular cells of the anterior pituitary were traditionally divided into acidophils, basophils and chromophobes, this book is a revelation. The development of new techniques in cell biology – molecular genetics, monoclonal antibodies, light and electron microscopic immunocytochemistry, *in situ* DNA hybridisation and recombinant DNA technology have all begun to impinge on our understanding, histopathological classification and treatment of endocrine tumours.

Four chapters are devoted to understanding peptide biosynthetic pathways and three chapters on new methods of histological examination. Excellent chapters review the use of *in vitro* models for studying the pathobiology of endocrine tumours and the potential clinical use of neuron-specific enolase as a tumour marker.

The last third of the book contains four chapters which consider how our perception of endocrine tumours of the gut and pancreas, lung, medullary

carcinoma of the thyroid and pituitary adenomas has been modified using new technology.

My only criticisms are minor. I thought the last chapter on endocrine syndromes was out of place in this volume and should have been omitted. In the chapter on endocrine tumours of gut and pancreas the authors are confused in their description of clinical presentation of MEA type I and type II syndromes and in the introductory chapter the word thyroid is frequently misspelt.

This is the first volume in a series written for pathologists. It is expensive at £35, but I would recommend a copy be purchased by every pathology department.

S.M. Shalet

Hormone-Producing Tumours of the Gastrointestinal Tract – Contemporary Issues in Gastroenterology, Vol. 5. Edited by S. COHEN & R.D. SOLOWAY. Churchill Livingstone, ix+164 pp, 1985, £36.00. ISBN 0 443 08370 3.

This book on hormone producing gastrointestinal tumours, deals informatively with the well-established and the newly-emerging gastrointestinal – peptidergic – syndromes. The current diagnostic methods and management of gastronomas is well presented with a pragmatic approach to treatment. The chapter on somatostatinomas draws attention to the newly emerging syndrome associated with this tumour, which should lead to better recognition and earlier diagnosis of this disorder, rather than the present situation of incidental histological diagnosis postoperatively. The chapters on glucagon producing tumours and VIPoma syndrome are very comprehensive, the latter drawing on what must be one of the largest personal experience of such tumours. The chapter on surgical management serves as a concise overview and briefly discusses carcinoid tumours and insulinomas. The first chapter gives a general introduction and the necessary histopathological background to the subject. It is a useful book for endocrinologists, gastroenterologists and the specialist surgeon, though slightly overpriced.

Syed Rafeeq Ahmed

Advances in Cancer Research, Vol. 43. Edited by G. KLEIN & S. WEINHOUSE. Academic Press, x+320 pp, 1985, £41.00. ISBN 0 12 006643 2.

Review volumes should be up to date, although this is less important for the non-specialists who wish to

keep abreast of neighbouring fields. This book contains some 1984 references and is as up to date as hardbacks ever can be. It also contains the 1876 reference to the first recorded experimental transplantation of a tumour, the canine transmissible venereal tumour. Indeed it maintains the high standard of the previous volumes.

'Cancer Metastasis' by Schirrmacher gives a clear account of the experimental methods, from *in vitro* transfection to various animal models, and a list of scientific questions. Organ site predilection and extravasation are discussed briefly but interestingly. Angiogenesis and vascular distribution is given more emphasis than lymphatic pathway spread. Invasion by proteolysis is well discussed. Immunological intervention in metastasis is described clearly and somewhat optimistically. The chapter is good on description but rather short on criticism. It gives a good introduction to the subject for new workers in the field.

Cohen's chapter about canine TVT is interesting in showing that this undifferentiated tumour can be transmitted by the transplantation of cells into injured tissue even in immunocompetent allogeneic dogs. It is believed that this transfer is unique in nature. The lack of rejection is discussed but not solved.

Rotter and Wolf discuss the tumour antigen p53. This protein is present in greater quantity in transformed than nontransformed cells, and is in the nucleus of the former but in the cytoplasm of the latter. Its role in cancer cells is discussed.

Schlom and nine co-authors describe the approximately two dozen best-characterized monoclonal antibodies which are reactive with human breast tumours. This is a timely progress report in a fast-moving field; the number of these tumour 'fingerprints' is increasing. The problems of MABs for tumour therapy is sensibly discussed.

Folkman's chapter on tumour angiogenesis is a model of clarity. His five pages on inhibitors of angiogenesis, as a means of arresting tumour growth, are interesting but inconclusive. The marked variation of antiangiogenic activity of different batches and makes of heparin is mentioned.

Moelling describes the twenty-two oncogenes in retroviruses that were known at the time of writing, and possible mechanisms of transformation.

Szigeti describes the inhibition of migration of polymorphonuclear granulocytes and macrophages by LIF and MIF respectively as a test of cellular immunity in tumours. A table summarising apparently all of the 45 publications to date on the application of this test to human breast cancer is included. The nature and character of the participating antigen(s) are not understood and LMI studies cannot distinguish malignant and

benign pathological changes of the breast in a reliable way. Applications to other solid tumours are also reported thoroughly, with conflicting results except in colorectal cancer where the LMI assay, when combined with other tests, was found to be promising.

This volume is well worthwhile both for reading to remain up to date in general and as a source of references for the particular topics.

J.F. Fowler

Molecular Medicine, Vol. 1. Edited by A.D.B. MALCOLM. IRL Press, viii + 208 pp, 1984, £13.50. ISBN 0 904147 93 2.

The editor of this new series, Alan Malcolm, bravely claims in his introduction that 'future improvements in health care are going to rely heavily on our understanding of the molecular basis of the (disease) process'. I do not disagree with this statement but in the short-term the inability of the molecular approach to describe the more complex behaviour of whole organisms has prompted numerous sterile critiques of the method and its underlying reductionist philosophy. The success or failure of *Molecular Medicine* will be judged by the degree it demonstrates the real usefulness of molecular analysis in a wide clinical setting. Is it a useful area to cover in a series? Unequivocally yes, as a forum for the two-way exchange of perspective between clinician and molecular scientist. This is a role that is not adequately filled by either the specialist journals nor their occasional review articles. Does it achieve these aims? The answer here is that it has probably been pitched too conservatively with too much emphasis on clinical activity with no direct relationship to the topic of *Molecular Medicine* as opposed to *Medicine*. This is, in part, due to the initial choice of topics covered and in part due to the particular interests of some of the authors. I would add that all the articles are of high standard, well produced and of considerable interest.

The topics covered are fairly disparate and should, in theory, be connected by the thread of molecular analysis. This is certainly true of articles on chromosome rearrangements and cancer, collagen disorders and the use of NMR in clinical imaging. Slightly less molecular are articles on pulmonary emphysema, although much molecular biology is applied to the α -1 antiprotease inhibitor, and a very clear review of cholera and related toxins. However, articles on alpha-fetoprotein and the renin angiotensin system do not really exploit molecular analysis and an extremely readable, albeit bleak and depressing review of the