The Eighth Canadian Cancer Conference held in Ontario lives up to the high standard of its predecessors. The contributions cover nearly the whole range of cancer research from molecular biology to epidemiology and treatment.

Probably of greatest interest to haematologists at least will be the data of Sachs on the homeostatic derangements in leukaemia as revealed by bone-marrow cell culture, and the section by Friend and Rossi on differentiation in virus-induced leukaemic cells. From such evidence we may reasonably hope to identify the exact homeostatic errors that exist in various forms of human leukaemia. A more precise understanding at the molecular level will depend upon our knowledge of intracellular control of cell functions, a subject to which several papers are devoted.

Viruses retain their importance in experimental oncogenesis. For example, there are two papers which explore the basis of susceptibility to leukaemogenic viruses. In both chickens and mice the hypothesis of a single dominant gene responsible for susceptibility has proved on further analysis to be an oversimplification. Other genes or a combination of helper and defective viruses must be invoked to explain the facts.

In six papers on cell antigens we move from the well-founded though complex field of histocompatibility antigens to the much less certain area of tumour-cell specific antigens. The exciting observations of the Hellstroms that lymphocytes from patients with neuroblastoma can inhibit their own tumour cells *in vitro* will need confirmation and amplification. Both they and others emphasize that apparently new antigens in tumour cells may be no more than the reappearance of antigens normally expressed in foetal cells. This conclusion echoes Potter's observation on biochemical mimicry of foetal patterns of enzymes in hepatomas.

Once again what emerges from these proceedings is a notion of the immense complexity of neoplastic processes and of the technical dexterity needed to wrest the smallest quantum of general truth about any of the diverse forms of cancer.

H. E. M. KAY

Renal Stone Research Symposium Edited by A. Hodgkinson and B. E. C. Nordin. (xv + 332; illustrated. 70s.) London: J. and A. Churchill Ltd. 1969.

It is sad that though this symposium was held in April 1968 the proceedings are only published in November 1969. It was a fine gathering of 120 people who between them covered a wide range of topics on this small subject. These

included the historical and geographical differences in the pattern of incidence of urinary stones, the natural history of renal lithiasis, sex and age distribution, organic matrix content and x-ray diffraction studies, micro-radiographic studies in the aetiology of renal calculi, histological appearances in stone formers and non-stone formers, pyrophosphate and stone formation, activity products in urine, primary hyperoxaluria, etc. The book therefore is a mine of information. The papers are short and lucid, but the print is small. One of the most interesting papers is that on the inhibitory effect of pyrophosphate on the formation of stones, and the diminished concentration of this substance in the urine of patients who form stones. Clinically there is the interesting observation that the spouses of stone formers also tend to have a high urinary calcium excretion and that therefore 'the familial incidence of calcium containing renal calculi should not be ascribed to genetic factors unless the influence of dietary factors has been taken into account'. A useful book.

H. E. DE WARDENER

Biochemie der Gefasswand. Biochemistry of the Vascular Wall. Biochemie de la paroi vasculaire International Symposium, Fribourg, June 1968. Edited by M. Cornel and L. Laszt. (Pp. viii + 380; 102 figures and 71 tables. SFr. 80.00, DM 80.00, \$19.20, and £8.) Basel and New York: S. Karger AG. 1969.

This volume records the proceedings of an international symposium held in Fribourg in June 1968. Of the 20 papers, 10 are in German, seven in English, and three in French. Most, but not all, have short summaries in the other languages.

The field indicated by the title is covered in great detail and particularly useful papers are those on 'Ionic composition of the arterial wall' by Schoffeniels, 'Le collagene vasculaire, sa tenure et sa biochimie' by Ebel, 'The muscle proteins of the vascular wall' by Hamoir, 'A study of myosin filaments' by Shoenberg, and 'Biochemistry of elastin' by Banga. Shoenberg's contribution on myosin filaments is the only British-based paper. Each paper includes an extensive list of references and these will undoubtedly prove useful to workers in the field.

This volume will prove of great value to those who work on vascular biochemistry but cannot be expected to interest a wider audience.

T. CRAWFORD

The Cell in Health and Disease By J. K. Frost. Monographs in Clinical Cytology 2. (Pp. xii + 147; 81 figures, 2 diagrams,

and 15 charts. 78s.) Basel and New York: S. Karger AG. 1969.

This is the second of a commissioned series of 'Monographs in Clinical Cytology'. To do justice to the title would need a work in many volumes, rather than such a slim one devoted to exfoliative cytology.

The author insists at the start that *communication* is all-important. 'Of basic necessity is the recognition of adequately defined points of reference within the desired frame of activity, and the proper characterization of them with appropriate nomenclature.' Diagnostic cytologists (of whom your reviewer is one) do indeed need a marriage of their subject with cell biology in general, so that defined terms and concepts will be held in common. But the bridging of the two cytologies is not achieved by this book, nor does it give any new insight into the functional significance of what one sees in stained smears. For instance, the chapter headed 'Growth activity and functional differentiation' contains no word about the kinetics of cell populations, and little about present-day ideas of how differentiation comes about. Instead, we are introduced to euplasia, proplasia and retroplasia, which are states of 'growth activity' (not of tissues but of individual cells) as estimated by their morphology, and uncheckable by any appeal to measurement or experiment.

The greater part of the book is taken up with morphological descriptions of cells seen in cervical smears, sputum etc, of a kind more appropriate to textbook or atlas of cytodagnosis. But a beginner could hardly use this as his reference text, and a trained person will mainly find what experience has taught him already.

A. I. SPRIGGS

Diagnostic Cytology of the Uterine Cervix VI By S. F. Patten. Monographs in Clinical Cytology, Vol. 3. (Pp. vi + 209; 190 figures. 110s.) Basel and New York: S. Karger AG. 1969.

A detailed and factual treatise of the cellular changes seen in inflammatory and benign proliferative states, in metaplasia, dysplasia, carcinoma *in situ*, and invasive cancer of the cervix in all their various forms with much quantitative data painstakingly acquired by the author and other workers. It cogently presents the case for cytology as a valuable diagnostic and prognostic tool far beyond its value as a screening procedure. This is supported by close correlation of cytological and histological changes.

This is the third in a series of discerning monographs in this field and provides a most valuable addition to the definitive cytologist's library.

O. A. N. HUSAIN