

This new edition shows radical updating of many sections, new diagrams, upgrading of others and the introduction of some beautiful colour plates of the cells involved in the immune response.

This is not a monograph to be recommended for one's hospital library but to buy for oneself; it will help overcome many difficulties in practice and through many examinations.

Renal Adenocarcinoma. A Series of Workshops on the Biology of Human Cancer. Report no. 10

Edited by G. SUFRIN and S. A. BECKLEY. Pp. 215. UICC Technical Report Series vol. 49. International Union against Cancer, Geneva, 1980. Sw. Fr. 17.00.

Although adenocarcinoma of the kidney is a relatively infrequent human malignancy it poses many unusual and difficult problems. This workshop, attended by experts from Europe, Great Britain and the United States, addressed these problems and the findings are published in a concise volume which ranges over such topics as spontaneous, hormonal and chemically induced renal adenocarcinomas in animal models, viral models of the cancer in animals, studies on steroid receptors in animal and human diseases and the immunology of the tumour.

The book is not intended to be comprehensive but does discuss methods of investigation of human renal neoplasms and comments briefly on the present unsatisfactory state of the treatment for disseminated disease. Survival in patients who have metastases is no better today than 20 years ago.

The biology of a tumour that can show spontaneous regression, which arises from the proximal renal tubule and yet shows receptor sites for progesterone, oestrogen, androgen, corticosteroid and aldosterone, and which shows a high degree of association with another renal disease of unknown aetiology, namely endemic (Balkan) nephropathy, must remain a fascinating topic.

It is produced as a UICC technical report and is well worth its modest price.

Somatic Selection and Adaptive Evolution on the Inheritance of Acquired Characters

By E. J. STEELE. Pp. 91, illustrated. Croom Helm, London. Williams and Wallace International, Toronto, 1980. £8.95.

In this short book one of the central doctrines of genetics is challenged. Since the late 19th century it has been taught that the soma does not influence the genome. Past evidence points to a unilateral flow of information from the gene to the cell

and acquired advantages do not directly influence the gene in a way that they can be transmitted to a subsequent generation. The author suggests that this could be wrong. An advantageous somatic mutation could be selected for, cloned, and have the benefit transferred back into the genome, perhaps, by an RNA virus vector. In this way an organism could adapt to its environment. As evidence for this the author quotes an experiment, performed in 1920, in which an abnormality was evoked in a rabbit's eye by treating the animal with anti-lens antibodies during pregnancy and it was noted that the abnormality was transmitted without provocation to further generations. Inheritance was not Mendelian and the experiment has not been repeated. The other evidence is immunological. There is a need to find an explanation for the extreme variability of antibody response to a stimulus, followed by the genetic transmission of the somatic mutation, but the neo-Lamarckian explanation is riddled with contradictions.

The idea of the inheritance of acquired characteristics has intrigued scientists, but it is unlikely that this book will enable the metaphorical Lamarckian giraffe-neck not only to increase in length by stretching for the green leaves on the highest branches, but also to twist around so that genetic information can flow in the opposite direction!

Spinal Deformities

By ROBERT ROAF. 2nd edn. Pp. xii + 372, illustrated. Pitman Medical, London, 1980. £35.00.

The title of this book does not do justice to the text which includes (and rightly so) important conditions such as lumbar disc protrusions and spinal stenosis, which are not usually associated with deformity. The second edition is over a hundred pages longer than the first. This expansion is due to the inclusion of chapters by five experts who deal with spinal radiology, anaesthesia for spinal operations, anthropometry and the medical aspects of scoliosis. The section on the radiological examination of the spine is both succinct and comprehensive and is a credit to the expertise of Dr W. Park. The book deals with the whole range of spinal deformities and disorders although there is a certain unevenness in the amount of space devoted to the various topics with an emphasis on scoliosis, a field where Professor Roaf has long had an international reputation. No operative detail is provided but this can readily be found by consulting the ample references. Overall the book provides a broad and clear coverage of the whole field of spinal diseases as it affects orthopaedic surgeons.