mental studies for a particular concept, and in the other the published case for and against a particular view is contrasted. Here a circumstantial case is built up by making a one-sided selection from existing literature, without new experimental evidence, extrapolating far beyond the purposes for which most of the experiments were done. An apologia in the epilogue shows that the author is himself rather worried about the propriety of this, and the view that theoretical science is acceptable only if it has demonstrable mathematical integrity, as in theoretical physics, is disingenuously deprecated by his description of himself as 'wholly free of mathematical sophistication' (p. 129). We all have our patterns of thought, on which our work is based, and I think that biologists should publish only those which they have tested by experiment.

The book is therefore worrying in principle. It is also imperfect in practice. Nearly half the book is an account of specific immune responses, not needed by an immunologically informed reader, and misleading to others who may well be enticed by the broad implications claimed for the book (eg, the terms 'antibody' and 'immunoglobulin' are not 'essentially synonymous' (p. 17) and it is neither 'axiomatic' nor correct to say that 'in health there is no immunological reaction against normal body components' (p. 46). Phylogeny of the immune response is outlined, apparently irrelevantly, and distorted accounts of various immunological phenomena, as, for instance, immunodeficiency (pp. 201 and 205), are cited in favour of views which they do not substantiate.

Finally, the concept of immunological surveillance is considered in the last 75 pages in three contexts, all so important for medicine that they may well entice a number of readers not equipped to be adequately critical—hence the justification for an adverse review in a general journal. The case in cancer is adequately but uncritically presented—this is now discussed as a likely, but not established phenomenon, in undergraduate teaching. Diseases, uncritically and often insecurely classed as autoimmune, are then considered in this light, and, finally, a totally unsubstantiated claim is made for an immunopathological theory of aging. The style is wordy and repetitive, but there is a reference list of broad and exciting range. As a starting point in one of these fields an informed worker might achieve some stimulus—if only an irresistible urge

to disprove some of the more unlikely assertions. But this book is educationally dangerous for the uninitiated, because it is misleading in fact and conducive of untidy and undisciplined thought.

J. F. SOOTHILL

Progress in Allergy Vol. 14. Edited by P. Kallos and B. H. Waksman. (Pp. xvi + 340; 35 figures and 18 tables, £7.10.) Basel: S. Karger AG. 1970.

The latest volume in what must be one of the oldest series of immunological reviews has six sections which can, of course, only cover some of the many recent advances in the subject. They are, however, critical and thoughtful reviews rather than annotated lists of recent publications.

The momentum given to the study of antibody structure by Porter's splitting of the gamma globulin molecule continues and so, unfortunately, does the apparent heterogeneity of antibodies. The chapters on myeloma proteins as analogues of antibodies and on synthesis and assembly of immunoglobulins both manage to avoid entanglement in the minutiae of chain amino acid sequences. They give current views on how immunoglobulins are put together and what they look like, although detailed knowledge of a specific combining site is still to come.

After a period of relative neglect macrophages are again closely though controversially related to antibody synthesis. The unresolved problems are well discussed. The need for cell cooperation is taken further in the chapter on immunocytes which discusses the functional diversity of lymphocytes. This is followed appropriately by a review of the biological effects of antilymphocyte serum.

Perhaps to remind readers that immune phenomena are usually responses to antigens, the final chapter is devoted to that most unpromising of allergens, house dust. As might be expected, house dust proves to be as heterogeneous as some of the factors already described.

This is a useful volume in a valuable series but it is aimed at the specialist. The general reader might learn a lot but he would have to work hard.

A. A. GLYNN

Clinical Laboratory A Handbook of Clinical Diagnosis by Laboratory Examinations. Edited by A. W. Karakashoff and H. I. Pandov. (Pp. 990; 536 illustrations,

40 in colour. Approx. £3 (official rate) £1.75 (tourist rate)). Sofia: Medicina Fizkultura Publishing House. 1970.

This book is written in Bulgarian so could only be of very limited interest to this country. Nevertheless, British clinical pathologists should be made aware that first-class work is being done in Bulgaria. The book is well produced, and appears to be comprehensive and reasonably up to date in methodology and interpretations in chemical pathology, haematology and clinical microscopy. About one third of its many references are to Eastern European publications.

D. N. BARON

Alzheimer's Disease and Related Conditions A Ciba Foundation Symposium Edited by G. E. W. Wolstenholme and M. O'Connor. (Pp. xi + 316; 95 figures £4.) London: J. and A. Churchill Ltd. 1970.

Yet again one is not disappointed by the published results of one of the Ciba Foundation's excellent symposia. On this occasion, as on so many previous ones, a group of people with widely different methods of approach to a difficult problem have presented their views. These have been recorded, not only in the form of papers, but of extensive and fairly uninhibited discussions and the results are excellent. Here is a mixture of old and new knowledge gained from very various techniques ranging from the silver methods to electron microscopy. It is sad that in the 54 years since the condition was described by Alzheimer so little real understanding of the cause of the disease has been obtained, but much of what is known is to be found in this book. It will be most valuable to those psychiatrists, neurologists, and neuropathologists who want to be kept abreast of current work on this subject.

PETER DANIEL

The Differential Diagnosis of Fibroblastic Disorders By D. H. Mackenzie. (Pp. ix + 167. £2.75.) Oxford: Blackwell Scientific Publications.

This monograph fills a very real gap in surgical pathological literature and should be on the shelf of all pathologists and therapists dealing with disorders of the soft tissues. It fulfils the objects set out in the preface and the author is being modest.

in hoping that it 'may also help more senior pathologists'. The classification adopted is simple and practical. The chapters on 'reactive' lesions and the fibromatoses are invaluable. The book deals at some length with conditions like fasciitis which 'the British medical literature has virtually ignored'. The author draws extensively on the American literature to which so great a debt is owed in this field.

There are few misprints, though 'pruritis' in Table 4. 1 is unfortunate. The Table distinguishing non-osteogenic fibroma from the giant-cell tumour of bone is marred only by the statement that the latter is 'surrounded by sclerotic bone' in the gross. The final chapter could with benefit be transferred to the beginning of the book. A detailed clinical history, proper macroscopic examination, adequate tissue sampling, examination of non-irradiated material, etc. are points that are too important to be left to the end. But these debatable points in no way detract from the general excellence of this work.

J. G. AZZOPARDI

relationship between the susceptibility of an individual's cells to transformation by SV40 virus and his probability of developing a neoplastic disease. This leads to a consideration of the mode of action of viruses and other oncogenic agents upon DNA, and the subject of DNA repair is reviewed.

Two experimental techniques deserve particular mention. One is cell hybridization, the fusion of two cells of dissimilar kinds, which is a valuable means of exploring somatic genetics and of distinguishing the role of nucleus and cytoplasm. The other is the creation of allophenic animals through the mixture of fetal cells from two sources at the earliest stages of embryogenesis. The result is a mosaic individual with cells of both types evenly distributed in all tissues. If one cell type is from a strain of high cancer incidence and the other from a low cancer strain the question can then be asked: Does hyperplasia or neoplasia stem from the high cancer strain cells or from both? The answer can be found in this symposium.

H. E. M. KAY

Genetic Concepts and Neoplasia. A collection of papers presented at the 23rd Annual Symposium on Fundamental Cancer Research, 1969. (Pp. xiii + 620; illustrated. \$17.00.) Baltimore, Maryland: The Williams and Wilkins Company, 1970.

Most malignant tumours in man show some chromosomal abnormality—childhood tumours and acute leukaemia are partial exceptions—yet it remains impossible to state whether chromosomal change is either an essential cause or a consequence of the formation of a tumour. This ignorance might imply that genetic studies have failed to elucidate the fundamental nature of cancer and its causes. But such an assumption would be wrong as this symposium, held in Houston in 1969, makes clear.

Six hundred pages of detailed reviews and subsequent discussions cover a wide field equally divided between clinical and experimental research. For man, several papers deal with the topics of genetic predisposition and of clonal evolution. Advances have stemmed largely from the use of genetic markers, both enzymic and chromosomal, but the search for specific abnormalities analogous to the Ph¹ chromosome has been disappointing. One promising new approach explores the

Hypophysiotropic Hormones of the Hypothalamus: Assay and Chemistry Edited by Joseph Meites. (Pp. ix + 338; illustrated. £10.) Baltimore: The Williams and Wilkins Co.; Edinburgh: E. and S. Livingstone. 1970.

This is not a book for easy reading by the general reader. It is, however, a volume of the greatest importance to specialists and to endocrinologists. It surveys knowledge in the recently developed and vitally important field concerning the hormones secreted in the hypothalamic area of the brain, which control the function of the anterior pituitary gland. It reports, at length, the proceedings of a meeting held in the USA in January 1969, which was attended by a large number of experts in this field. The interpretations of the findings reported are examined extremely critically, both in the papers, and in the excellent discussion. The field is broadly covered by dealing not only with problems of assay of the hormones and current knowledge of their chemistry but also with the mechanisms of their secretion and its control. It might be especially noted that since the conference took place the thyrotrophic releasing factor is the first of these hormones to be characterized and finally synthesized.

F. T. G. PRUNTY

Fatal Civil Aircraft Accidents By P. J. Stevens. (Pp. xii + 206; 102 figures. £5.) Bristol: John Wright and Sons Ltd. 1970.

In the field of aircraft accident investigation, now well established, the small Halton RAF team has consistently demanded—and has itself shown—high standards of professional skill both at the scene and in the laboratories. We have so far had official reports, scattered papers, and Mason's very fine book on 'Aviation Accident Pathology' published in 1968, and now Stevens adds his experience in the investigation of civil accidents. He is a world authority, like Mason, and it was important that he also should sum up his views on translation from the RAF to civil consultant pathology.

This is a splendid book. It is remarkably comprehensive, yet so well written that it is orderly, reads succinctly, and with clarity. It is not over cluttered with statistics, yet the important data are there, and it is well illustrated. Stevens's great concern over the proper analysis and correct interpretation of natural diseases, alcohol, or drug and CO intoxication emerges in what is in fact the longest single section in the analysis of public transport accidents. The same pattern of analysis is followed in the shorter sections on light aircraft and glider fatalities. Much of this may not be new for those who have read the professional journals or heard Mason or Stevens at conferences, but the practical survey of a planned investigation of a major airliner disaster is most valuable. This is where experience counts, and this too, is where (as Stevens points out) even an enthusiastic amateur is better than a disinterested professional. Sims may well wish to withdraw this stand in odontology when his experiences of this field of study approaches that of Stevens. What emerges clearly is the need for attention to detail and absolute accuracy rather than professionalism. This book must have the attentions of all pathologists who accept medico-legal responsibilities.

KEITH SIMPSON