

they are afraid of). Saving her best contribution until last, Dr Beard has some sensible things to say about the assessment of staff by students.

Somebody once contrasted books which are commissioned by publishers and books which the author feels impelled to write. A weakness of the former tends to be that while they dutifully cover the ground they lack inspiration. Dr Beard's opening words are: "This book was written because I was invited to write it." Perhaps we ought not be surprised then that she has produced for us a comprehensive, but, on the whole, unilluminating account of teaching and learning in higher education.

ALAN SMITHERS

Two Hundred Years of Medicine

Oxford Medicine. (Essays on the evolution of the Oxford Clinical School to commemorate the Bicentenary of the Radcliffe Infirmary, 1770-1970.) Edited by Kenneth Dewhurst. Pp. viii+212. (Sandford: Oxford, 1970.) 50s.

THE Radcliffe Infirmary was opened in the October of 1770; the publication of this book by the distinguished Oxford historian of medicine, Kenneth Dewhurst, is one of the events to commemorate the occasion. By way of an addition to the official history of the infirmary by A. H. T. Robb-Smith, Dr Dewhurst has had the commendable idea of collecting together previously published papers which deal with the evolution of clinical medicine in Oxford. Many have appeared in journals with but a limited circulation and, as Dr Dewhurst rightly states, they merit the attention of a wider audience.

The essays follow a historical pattern which begins with a broad survey of Oxford medicine and goes on to treat in some detail the seventeenth century precursors and the eighteenth century founders of the clinical school. There is then a gap until an account of Acland, who was Regius Professor of Medicine from 1858 to 1895. The Oslerian period, 1905 to 1919, receives close attention and is perhaps the most delightful part of the book, for the contributors have concentrated their approach on personal reminiscences rather than treading the usual and well worn Oslerian pathways. Telling the story of Oxford medicine in the way that has been chosen makes it unavoidably uneven and episodic, but the book next includes a portrait of Sir Archibald Garrod (Regius Professor, 1920 to 1928), a greatly underrated physician whose accomplishments as assessed today would no doubt be worthy of a Nobel Prize. Four articles follow which are the most controversial of the whole series, dealing

as they do with the Nuffield benefactions. This financial infusion stirred the university and the Radcliffe physicians to interminable controversy, highlighted by Lord Nuffield's offer of several million pounds to change the name of the hospital to the Nuffield-Radcliffe Infirmary. The final historical sequence in the development of Oxford medicine is by no means the least, for it includes the story of the first use of penicillin in man, a sketch of Hugh Cairns, the principal architect and catalyst of the present clinical school, and Professor L. J. Witts's thoughtful essay on "Success in Medicine" which should be read by every young medical man.

Dr Dewhurst has had, of course, to exercise selection and could not present a complete coverage of the history of Oxford medicine. He has done so judiciously, however, and has included papers based on the authors' experience of "a novel or idiosyncratic view of persons or events". It is this approach that has made the book so attractive. Not only will it be of great interest to those who have participated themselves in Oxford medicine, scientific or clinical, but it should reach a much wider audience. It should be a source of inspiration, fascination and information to many people both medical and non-medical, and future historians will be grateful for a convenient collection of such useful material.

EDWIN CLARKE

Microbial Approach to Heredity

The Organization of Heredity. By Kenneth R. Lewis and Bernard John. Pp. ix+241. (Arnold: London, September 1970.) 70s boards; 35s paper.

THE authors describe this book as a molecular and analytical approach to heredity using knowledge derived largely from microbial genetics. It presents a very secure and broadly based foundation in the topics discussed; a number of these would hardly need further elaboration in a degree course.

The book falls into three parts. Part one, "The Chemical Organization of the Genotype", has chapters on the material basis of heredity, nucleic acids, and on the chemical basis of mutation. The second part, "The Genetic Organization of the Genotype", occupies nearly half the book and is the core of the work. Different genetic transmission systems are described. Then follow chapters on mapping in different systems and on the mechanism of recombination. The third part contains a discussion of the expression of genetic information (protein structure and synthesis, enzymes, and the genetic code) and a chapter on epigenetic interactions including complementation, con-

trolling elements and nuclear cytoplasmic interactions.

The book is deceptively small, for the text is very concise indeed; hopefully not too much so for students. Seventeen pages describe in detail non-reciprocal events in *Sordaria*, *Ascobolus*, *Neurospora* and *Saccharomyces* tetrads, and relate these to Holliday's model. Essential diagnostic features and conclusions are often tabulated. There are numerous clear diagrams and tables. Reference is made to 100 original papers and reviews and, in spite of the emphasis on microbial systems, half of the ninety species quoted are neither bacteria nor virus.

The topics are well integrated and cross-referenced. The authors have been successful in that their approach has transcended the biological peculiarities of the various systems used as examples. Without such integration some students store their genetic knowledge in units isolated by system and species. Students could progress directly to recent papers in microbial genetics, or to advanced texts on developmental genetics or population genetics. Several topics more peripheral to the principal discourse are introduced (for example, cytoplasmic heredity, puffing in polytene chromosomes, and paramutation) and these suffer from brevity. In general, though, this book carries very little fat and could form an excellent backbone for a second or third year course in genetics, especially as there is a paperback edition available.

J. R. S. WHITTLE

Views of Deafness

Sensorineural Hearing Loss. Edited by G. E. W. Wolstenholme and Julie Knight. (A Ciba Foundation Symposium.) Pp. x+358. (Churchill: London, 1970.) 80s.

SENSORINEURAL hearing loss is the name given to deafness resulting either from some disorder of the inner ear or, more rarely, from damage caused by a lesion within the ear. More than half the deaf population are so afflicted and, because the disorder affects the neural structures themselves, little hope at present exists of any form of cure.

This disheartening state of affairs led Mr Jack Ashley, MP, who suffers from this form of deafness himself, to persuade Ciba to hold a symposium on the subject in December 1969, the aim being to review present knowledge and to consider the ways in which future research might more effectively be directed. The distinguishing feature of this symposium was its multidisciplinary approach; the participants included physiologists, otologists, pathologists, audiologists, psychologists, geneticists and physicists, each of whom had made some special contribution to the study of sensorineural