assess the spread of developmental stage that he, or she, can expect to find in embryos examined at a particular time of gestation. While the major features of development of the main organ systems are described, the emphasis of the text is on stage-specific characteristics. Thus, the reader who uses the book for the purpose of identification or understanding, in order to map the expression of specific genes or analyse the anatomical effects of a mutation, will quickly find it wanting in detail. With a little work one can piece together an adequate picture of the development of some organs. In this the reader is aided by good line drawings representing reconstructions of the heart, or gut, etc., at several stages over their formative periods. However, coverage of organogenesis is patchy. A few well-chosen diagrams explaining the morphogenesis of the major organ systems would have illuminated much of the anatomical landscape.

The uneven coverage of the text is reflected in the illustrations. The general progress of development is beautifully documented by an excellent series of low-magnification photographs of living embryos and histological sections through whole embryos. However, the detailed histological photographs which supplement these general views provide an incomplete picture of organogenesis. The illustrations are more sparsely labelled than one would like in a book destined to lie open beside the microscope while the reader struggles with the identity of some gene-expressing tissue. Almost all of the sections illustrated are parasagittal. Representative sections in the transverse and frontal planes would have been invaluable to any reader who wants to visualize the embryo in three dimensions. The advanced stages of skeletal development are better documented in this respect, with excellent photographs of cleared whole mounts. The integration of text and figures is generally good, but in places is made awkward by inconsistent nomenclature.

The intrepid biologist requires three things of his chart of the mouse embryo: a definitive description of the stages of development, a map to find his way around histological sections, and an integrated description of embryonic development and organogenesis in the mouse. The book fulfils the first of these functions excellently and the second adequately, but for the third function this slim volume is rather disappointing. Understanding the molecular-genetic basis of mammalian development will require a thorough documentation of the anatomical phenotype. In this context, 'The House Mouse' is an indispensable atlas. Oh, for an Ordinance Survey map!

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Garrod's Inborn Factors in Disease. By C. R. SCRIVER and B. CHILDS. Oxford Monographs in Medical Genetics No. 16. Oxford University Press. 1989. 247 pages, £25.00. ISBN 0 19 261574 2.

There can be few names in human genetics more revered than that of Archibald Garrod. He was responsible for introducing the concepts of inborn errors of metabolism, biochemical individuality and 'diathesis' or genetic predisposition. These ideas were elaborated in his two books *Inborn Errors of Metabolism*, based on the Croonian lectures given at the Royal College of Physicians and published in 1908, and *Inborn Factors in Disease*, published in 1931 after he retired. The former has been available for some years through Harris's 1963 edition. But the latter, perhaps a more valuable work, is now reproduced for the first time.

It is preceded by a brief essay by Joshua Lederberg which places the book in perspective, followed by a prologue in which Charles Scriver and Barton Childs, both themselves eminent human geneticists, dissect the importance of Garrod's contributions. It seems clear that though held in high regard by the medical profession during his life (he succeeded Osler as Regius Professor of Physic at Oxford, he was knighted and elected a Fellow of the Royal Society), the scientific value of his contributions seems largely to have gone unrecognized at the time. Several reasons for this are discussed. Physicians were much more concerned with the overwhelming problems of untreatable infectious diseases, geneticists were often still obsessed by the Galtonian–Mendelian dialogue, and biochemists were not accustomed to thinking along the lines of biochemical individuality, and in any event did not have the techniques for investigating such matters in depth. His brilliant insights were neither testable nor apparently appealing to investigators of his time. How often this is true in the history of science!

Finally, the book concludes with an epilogue in which Scriver and Childs consider our current ideas on genetic predisposition which indicates just how far we have travelled since Garrod's day.

This is a book which should be widely read: for the authors' thought-provoking essays; for the historical importance of Garrod's ideas; and for the clarity of his writings, which provide a fine model for scientific writers of today.

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