distribution between white and black probands, and between male and female probands. It is helpful in this section that distinction is made between a malformation occurring as an individual finding and where it is part of a multiple malformation pattern. This book will mainly be of interest to epidemiologists with an interest in congenital malformations, but clinical geneticists and paediatricians interested in congenital malformations will also find much of value here. In other, largely epidemiological, studies it is frustrating for a clinician interested in diagnoses in individual cases to try and work out which malformations were linked together in a single child. However, this report contains supplementary information about individual cases and helpful details are given about associations of various malformations. The study certainly demonstrates the value of a longitudinal study, since it showed that significantly more children had malformations detected during the period from one to seven years than were found in the first year of life. It demonstrates the potential value of an "active" congenital malformation register to those involved in planning services.

Dian Donnai

**The Hemoglobinopathies**


The editor of a previous volume of this series described writing a book devoted to laboratory methods as having "about the same intellectual and emotional appeal as copying out a telephone directory". One can sympathise with this view, but as this series has shown, when done properly the result is extremely useful and this current volume lives up to its predecessors. There is no substitute for extensive experience to know a technique inside out and few can surpass Titus Huisman and his team of authors in the haemoglobinopathy field.

The format combines background information, step by step recipes, interpretation of results, and comments on the problems likely to be encountered. Basic techniques, such as measuring Hb A2 and F and detecting unstable haemoglobin, are extensively covered, as are more recent techniques requiring sophisticated (and expensive) equipment for high pressure liquid chromatography and isoelectric focusing. Both novitiates and more experienced workers are likely to benefit, although perhaps a chapter on detecting haemoglobinopathies for those on a limited budget would have widened the book's appeal to those in developing countries.

I found very few mistakes – missing decimal points in figure 4.1 lead to persons with 50% Hb A2 – although the quality of some of the tone illustrations could have been better. The chapter on oxygen equilibrium measurements is excellent but it is a pity that the advantages of the complex apparatus used were not compared with the more common, but limited, commercially available ones. These are minor criticisms, however, in what is a useful laboratory handbook which should also increase understanding of the methods involved. The final section, a listing of the more than 450 haemoglobin variants described to date, shows how valuable these methods have been. It also reminds us of how necessary telephone directories are.

W G Wood

**Evolution from Molecules to Men**


There is no doubt that Darwin, and of course Wallace, revolutionised the thinking of biologists – at first morphologists and anatomists, but more recently molecular biologists and ethnologists. This current volume is concerned with these various issues and took origin in a conference held in Darwin College, Cambridge, in 1982.

The text consists of some 26 chapters, divided into four sections: The history of evolutionary theory, Molecular and cellular evolution, Evolution of the whole organism, and Evolution of social behaviour. Those chapters dealing with the evolution of gene families and clusters, population genetics, and human evolution, will probably be of most direct interest to medical geneticists. But there is much more. Many contentious issues are considered: is macroevolution merely an extension of microevolution, and how far is behaviour so influenced; how relevant are such concepts as altruism and selfish DNA in the context of evolution? Furthermore, is the theory little more than a successful metaphysical research programme or at worst a series of tautologies and that those species which are capable of reproducing themselves will succeed while those that cannot will die out? These concepts are put in perspective in an epilogue by Passmore, a philosopher, which biologists already versed in evolutionary theory might profitably read after Sir Andrew