vanadium, and even arsenic. In general the toxicity of elements was appreciated before their essentiality, so although the latter elements have only been shown to be necessary for laboratory models their importance for man may yet be discovered. Human deficiencies of zinc, copper, molybdenum, and selenium have only been proved in the past 20 years, and the contribution on the diverse metabolic roles of manganese suggests that a similar clinical importance of this element may soon be demonstrated.

Further work on the metabolism of trace elements depends on new approaches including multielemental analytical techniques, the use of low abundance stable isotope tracers rather than radiolabels, and the measurement of proteins that regulate the metabolism of the elements (for example, the role of metallothionein in regulating zinc, copper, and cadmium); all are well described here. These techniques will be needed to solve the perennial problem of how to determine if an individual is at risk of developing a deficiency or toxicity or is actually in such a condition. Certainly anyone who reads these chapters will justifiably become sceptical of claims that simple analyses of hair or plasma are indicative of an individual's trace element 'status'—whatever that may be.

Readers, irrespective of their degree of experience in this area, would find new information, insight, and inspiration from the work presented here, but the book is expensive and it would be best consulted in a library rather than bought personally.

P J Aggett
Senior Lecturer in Child Health and Nutrition
Department of Child Health, University of Aberdeen


This volume is subtitled 'The Enid Gilbert-Barnes Festschrift', and is a collection of papers by friends and colleagues in honour of Enid Gilbert, a leading contributor to the field of paediatric and genetic pathology. It is also published as a supplement of the American Journal of Medical Genetics. Being a Festschrift it has no clear theme and no other declared purpose, but is a pot pourri of papers and reviews loosely embraced by the main title. The book is divided into six sections, the first of which deals with general principles and methods. The chapters on molecular biology applied to prenatal diagnosis and developmental pathology, a review of prenatal death in humans, and papers on midline developmental 'weakness' and neurotomes as the basis of some multiple congenital malformations are of general interest. There is also a useful paper on the differential diagnosis of posterior cervical hygromas in previable fetuses. The second section on developmental effects of aneuploidy and chromosome abnormalities includes a discussion of cytogenetic abnormalities among spontaneously aborted previable fetuses, and a series of case reports of cytogenetic syndromes. The other sections cover skeletal dysplasias, biochemical and metabolic aspects of developmental pathology, syndromes and malformations complex, and cardiac teratogenesis. Papers on short rib polydactyly syndromes, the pathology of the liver and kidney in Meckel's syndrome and a discussion of the causes and pathogenesis of cardiac malformations appealed to the reviewer.

This book achieves its aim as a remarkable tribute to a distinguished pathologist and paediatrician. It is not a book which most non-specialist readers will want to own, but they should browse through it to indulge their own interests.

P J Berry
Consultant Paediatric Pathologist
Bristol Royal Hospital for Sick Children


This book is written by a paediatrician who clearly knows a great deal about children, parents, and asthma. He believes that, with proper information and understanding, parents can undertake most of their children's care, reducing emergency visits and hospital admissions to an unavoidable minimum. Basic facts about asthma and its management are presented in a clear, positive manner and supplemented by parents' descriptions of their children's problems and how they coped with them.

The sections on the assessment of asthma by monitoring 'The Four Signs of Asthma Trouble' (wheezing, recession, prolonged expiration, and increased respiration rate), keeping records, and using a peak flow meter are excellent and could be read with benefit by many doctors. Clear instructions are given on the use of metered dose inhalers, spacer devices, and nebulisers, but the drugs recommended are sufficiently different to confuse British parents (for example, nebulised metaproterenol instead of salbutamol). Dry powder inhalers, so widely used in this country, are not mentioned. Prophylactic treatment is based on theophyllines, though sodium cromoglycate is also approved. Inhaled steroids rate only a brief paragraph and are not mentioned at all in the case reports.

I liked the advice on how to choose a doctor (minimum criteria: gives written instructions, teaches and monitors use of devices, measures peak flow at each visit), when to seek specialist advice, and how to deal with accident and emergency departments and hospital admission.

Parents who can select appropriate information would benefit from reading this book and it could be a valuable basis for discussion at local asthma society meetings.

E J Hiller
Consultant Paediatrician
City Hospital, Nottingham


This is an excellent small book which goes where few have dared to go. The author has bravely attempted the equivalent of organising a barbecue for vegetarians in writing a book for the clinician, who has even at this late stage in the millennium, no prior knowledge of computing.

The book succeeds in covering the basics and gently takes the reader into more complex areas. Those who have a reasonable experience of computers in medicine will find this a valuable source of references and succinct explanations which they might quote. Those who dare to confront their technophobia and would like a concise guide to the potential of computers in medicine should find this book stimulating.

A wide variety of topics are covered: