Book reviews

And, as the editor explains in the preface, the cytoskeleton is involved in “such biological processes as cell shape changes, growth, motility, secretion, and division”. The cytoskeleton is clearly important and worth the consideration of any biologist.

Unfortunately, the wealth of information about microtubules, microfilaments, and intermediate filaments makes it very difficult to produce the comprehensive volume which might be expected behind the title Cell and Molecular Biology of the Cytoskeleton. The content of this book is not comprehensive. Many of the chapters are excellent, but each chapter stands in isolation making little contribution to the other chapters in the volume. The overall effect is erratic; for example, actin genes in Caenorhabditis elegans are given a whole chapter; actin genes in mammals are only considered, in passing, during a description of the relationship between actin and cell growth. Before buying this book, carefully scrutinise the contents page to check if a review suitable to your purposes is present.

On one point I can recommend this book without reservation. Just as the devil has the best tunes, cell biologists studying the cytoskeleton have the best photomicrographs. This volume contains some beautiful black and white photographs.

P N Goodfellow

Mendelian Inheritance in Man

Victor McKusick’s Mendelian Inheritance in Man has become such an inseparable companion for any worker in human genetics that its existence and regular updating tend to be taken for granted. Its growth has reflected the growth in our knowledge of genetic disorders, while it has itself helped to shape the developing speciality of medical genetics.

Most of us use Mendelian Inheritance in Man as a reference book, to check on the salient features of some rare or unfamiliar disorder, to provide a list of key references, or to see whether possible heterogeneity in a phenotype is known to exist. For all these functions the book remains indispensable, and the care taken in providing new editions such as the present makes it a resource without parallel.

Another aspect of the book is more often overlooked, and it is this which enhances its value as a book rather than purely as a collection of data. The foreword and appendices address a number of issues central to human genetics, and bring together a number of important facts. The number and proportions of known Mendelian disorders, the table of conditions for which a gene product is known, the current state of the human gene map, and the methods used to define it are a few of the areas where this synthetic aspect of the book shows its value. Similarly, the detailed analysis of particular loci, such as G6PD and haemoglobins, provides a wealth of detail on these systems, while for some of the major disorders, particularly those on the X chromosome (the origin of the book), the individual descriptions often form the best available short essay on the topic.

For all these reasons the seventh edition is as welcome as its predecessors and, regardless of its future availability in a computerised form ‘on line’, there is no doubt that it will continue to be a valued companion, to be read as well as consulted.

PETER S HARPER

Biochemistry and Biology of Plasma Lipoproteins

This multi-author volume offers a reasonable overview of recent developments in plasma lipoprotein metabolism. The stated purpose of the book is to highlight the application of new techniques, particularly those of cell and molecular biology, to the study of lipid metabolism and to provide a synopsis and chromosomal location of the apolipoprotein genes, etc. The author list is almost exclusively American and contains many distinguished investigators in the field. However, senior figures in the field, such as Brown and Goldstein and Bryan Brewer, are conspicuous by their absence.

While the book claims to be required reading for a wide spectrum of specialities and interests, ranging from cardiologists and pathologists to geneticists and molecular biologists, my impression is that its appeal will be to a narrower audience. Clinicians of all persuasions will find this book of limited interest as the clinical aspects are dealt with in a more stimulating manner in other, well established texts. This volume will mainly appeal to biochemists, research workers, and scientists working in the field of lipid metabolism. The subject matter is selective but reasonably comprehensive. However, due to the unavoidable delays between the receipt and the publication of contributions, the contents reflect the ‘state of the art’ up until late 1984 or early 1985. In such a fast changing field, such considerations become readily apparent.

The style and presentation of the book is functional but unimaginative, often reminiscent of a postgraduate thesis. Minor irritations include the American persistence in measuring lipid concentra-
tions in mg/dl instead of mmol/l and errors such as in table 7, p 461 which reports a gene frequency of familial hypercholesterolaemia of 1:1000 instead of 1:500.

The chapter on the genetics of the human apolipoproteins by Jan Breslow is well written, by an established expert in the field. However, due to the limitations outlined previously, there is no mention of the recent reports suggesting that specific apolipoprotein restriction fragment length polymorphisms may be genetic markers for susceptibility to develop obstructive coronary artery disease. Furthermore, there is no discussion of current clinical controversies regarding the value of measuring plasma apoproteins such as apo A-I, A-II, and B in predicting the presence of significant coronary artery disease.

In summary, this volume provides a good reference to the current concepts in lipid metabolism, but will appeal mainly to the non-clinician and basic scientists interested in this field.

**Alan Rees**

**Chorionic Villi Sampling**


There are now several useful books about chorionic villus sampling so one may ask, do we really need another just yet? The answer seems to be yes. This is a worthy little volume containing short, clear, and well-illustrated articles by members of several European groups with considerable experience and a pleasing scientific approach. It contains something of value for most workers in the field and will be read with pleasure much more widely. It will prove particularly suitable for the audience that it is aimed at, namely obstetricians.

It starts with a review of obstetric approaches for CVS by Bruno Brambati, with particular emphasis on obstetric complications, and a reassuring short term follow up of the newborn babies in the large Milan series. There is also a careful description of the problems and solutions of karyotyping chorionic villus material by G Terzoli and G Simoni, with up to date recommendations on how to maximise the number of mitotic figures available in short term (48 hour) chorionic villus cultures.

B Gustavii has three short articles in which he explains that he abandoned CVS under direct vision because it carries a greater risk of spontaneous abortion than other approaches; describes his simple method of transabdominal chorionic villus sampling, and discusses reasons for the high frequency of non-viable pregnancies found by ultrasound in women presenting with the request for CVS.

An obstetrician, a clinical geneticist, and a cytogeneticist describe their experience in Lausanne in three chapters that make easy reading because of their anecdotal nature. Three articles from Paris, on CVS using biopsy forceps, on a method for selective early abortion in multiple pregnancies, and on the application of molecular methods for prenatal diagnosis of the haemoglobinopathies are particularly welcome, as we might easily miss such articles in the French literature.

In addition, there is an interesting article by A Kleijer from Rotterdam on the present state of research in first trimester diagnosis of metabolic disorders, and one on the principles of DNA diagnosis from D N Cooper of the UK.

The book provides a good technical introduction to CVS. Its shortcoming is the absence of any discussion of the principles of evaluating the short and long term risks of the new procedure. Most practitioners are likely to become involved in a national or international collaborative register, or better, in a randomised controlled trial. For those entering the field, this is one of the most difficult scientific aspects to come to terms with. A short crisp article explaining the need for, and the practitioner’s moral responsibility to participate in good scientific follow up studies would have been particularly valuable.

**Bernadette Modeli**