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Whilst reviewing this book I got one or two of my medical students and also consultant colleagues to read it. The medical students found this book complemented their text books but in particular linked the basic science with the clinical syndromes very well. My colleagues, particularly those with no knowledge of genetics, found it extremely readable and, indeed, I found some difficulty in retrieving it from them.

I think this book is a must for all practising clinicians who have qualified before 1985. It makes molecular genetics extremely approachable and I would certainly recommend medical libraries to have a copy of it on their shelves.

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The New Genetics: Baillière's Clinical Paediatrics. Vol. 1, No. 2. Edited by I. D. Young. Harcourt Brace Jovanovich. 1993. 322 pages. Price £27.50. ISBN 0 7020 1746 9.

Baillière's quarterly series on clinical paediatrics covers a broad range of topics of interest to the practising doctor. Forthcoming attractions include arthritis in children, coma, transplantation and epilepsy. Each volume thus needs to give a fairly comprehensive review of its subject matter, couched in language suitable for the non-expert. Writers must also remember that paediatricians have now replaced surgeons as the non-intellectuals of the medical class.

Ian Young, as befits a man taught his subject in Edinburgh, has put together a very balanced set of eleven chapters on clinical molecular genetics. There is the statutory opener on technology, and then broad coverage of molecular cytogenetics, molecular morphogenesis and cancer genetics. Detailed chapters follow on the more common and important Mendelian disorders, cystic fibrosis, muscular dystrophy, haemoglobinopathies and fragile X. These four are written by the top men in the field, and are excellent.

The final part of the volume moves on to the applications of molecular knowledge in presymptomatic detection, carrier detection and prenatal diagnosis and screening. To round it all off, and I groaned when I saw it, there is the obligatory account of ethical issues. It is not, I hope, that I am seriously unethical, but rather that doctors write with such staggering incomprehension of the real scope and range of ethics that they can only insult their readers.

That gripe apart, this is not a bad little book. I imagine that, even though paediatricians are not known to read much, some will dip into it. When they do, they will find it well written and, dare I say it, fun.

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Eleménts de génétique quantitative et application aux populations animales [Elements of Quantitative Genetics and Applications to Animal Populations.] Edited by B. Bibé, B. Bonaiti, J.-M. Elsen, G. Guérin, J. Mallard, E. Minvielle, L. de Mondini, P. Mulsant and H. de Rochambeau. Versaille: Institut National de la Recherche Agronomique. 1992. 302 pages. Price 135ff. ISSN 0990 06323, ISBN 27830 0451 2.

In France there are very strong research groups of INRA, particularly at Jouy-en-Josas (near Paris) and in Toulouse, who have made significant contributions to developments in the theory of quantitative genetics and related statistical methods which form the basis of animal improvement. These and some other groups have also undertaken nice selection experiments in the domestic species. They and their colleagues have been and continue to be leaders in taking the theory and results to practical animal improvement. For example, they have been active recently in genetic analysis of reproduction in the pig, in developing mixed model methods for all-or-none characters, and in analysis of major gene effects. This multi-authored volume, with contributions by most of the top French workers, serves both as an overview of breeding practice in France and as a reference book on quantitative genetics.

The editorial group have identified almost 50 topics, arranged in six sections. These deal with, in order: genetic improvement in France; bases of quantitative genetics; selection objectives and criteria; evaluation of breeding stock; management of populations; current and future contributions of genetic markers in improvement of animal populations. The sections and some of the chapters are multi-authored; several individuals are authors of more than one chapter. In principle the set of chapters is sufficiently comprehensive that this could serve as a textbook. I doubt whether, strict though the editing is here, a work with dozens of authors could ever fill this need for inevitably there is unevenness of presentation, duplication and deficiencies. This book is therefore much better suited to the student or practitioner who has got some of the basics already, e.g. from books by Falconer or Ollivier (for the French reader) and wants to see a different, broader perspective. What I found most useful was that the whole was a comprehensive view from the perspective of the French group of the principles of quantitative genetics and their application to animal improvement: the problems and solutions they consider important. It would be invidious to pick out particular chapters for comment.

There is a lot of material here, 300 pages of two column A4 with quite small print (except for a lot of inter-chapter blanks). There are plenty of examples to quote from. Even those whose French is as weak as mine will get something from it, for there is a high density of difficult technical words such as 'heritabil-

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ité', 'séléction' and 'génétique' and some familiar formulae. Overall I believe this is a very useful book.

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Genetics for Beginners. By STEVE JONES and BORIN VAN LOON. Icon Books Ltd, Cavendish House, Cambridge Road, Barton, Cambridge. 1993. 175 pages. Paperback. Price £7.99. ISBN 1874166 129.

This is a very curious little book, whose purpose is, I suppose, to introduce non-scientists to the subtleties, excitements and threats of modern genetics. It consists of a small amount of much-fragmented text by Steve Jones squeezing into the little areas on most pages not taken over by the obtrusive drawings of Van Loon. Steve Jones often gets two lines or less to a page, and rarely more than half the page. These bits of text tend to lack continuity and consist mainly of small nuggets of genetic knowledge which will give the reader a very simplistic view of the subject, though a few impressive sentences may stick in his or her mind for use at parties.

I suppose the drawings are intended to fill in the gaps in the reader's education, but they are really not designed for that purpose. The drawings are clever, often witty, give recognizable portraits/cartoons of Watson and Crick (several of each, which are surely meant to amuse a small elite group of geneticists and molecular biologists), and of past and a few present

important figures. The drawings also get in as many puns and jokes as possible. These can be amusing (Thomas Hunt Morgan, the father of *Drosophila* genetics, is shown beneath a very large front view of the fly, saying 'Time flies like an arrow, but fruit flies like a banana!'. No, he did not really say that!

The trouble with the drawings is that they make very little contribution to the reader's knowledge, and will in many cases mislead or confuse him. They may well, however, help the book to sell more than Steve Jones' contribution will, and it would not surprise me if it became a cult book in a minor way.

However, genetics is a very important subject, and it is vital, in my opinion, that people and children who are acquiring or have acquired a general education should gain an understanding of both the principles of genetics and the problems and opportunities arising from genetic technology. Publishers appear to be unwilling to produce genetics textbooks designed for the uninitiated, though these might sell well and encourage sales of books at an intermediate level. Steve Jones had an opportunity to produce an elementary book which would fire the enquiring readers to further efforts in self education instead of letting them only admire the clever drawings and laugh at the jokes. I think this book is an important missed opportunity.

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