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An Introduction to Genetic Analysis (6th edn). Anthony J.F. Griffiths, Jeffrey H. Miller, David T. Suzuki, Richard C. Lewontin and William M. Gelbart. W. H. Freeman and Company, New York. 1996. Pp. 915. Price £27.95, hardback. ISBN 0 7167 2604 1.

Undergraduate genetics courses, and textbooks, come in two varieties: those which begin with Mendel and move on to molecules, and those which start with the structure of DNA and leave more abstract notions of genes until later. *An Introduction to Genetic Analysis* is clearly in the former category, aiming for a balanced approach between classical and molecular genetics but teaching the subject in a more-or-less historical sequence. Ultimately, however, the success or otherwise of a course (or textbook) depends less on the order of topics than on how well it is taught. I can report that Griffiths *et al.* teach genetics very well indeed.

This sixth edition retains all the features that have made it such a popular text with students and tutors. The stated aim of the authors is to explain genetics primarily in terms of the analytical approaches available. In this it succeeds superbly. The text is clear and easy to read with many examples illustrating key experiments and major points. To aid comprehension, key concepts are listed at the beginning of each chapter, highlighted as 'boxed messages' embedded in the text, and summarized at the ends of chapters. A particular strength is the inclusion of a large number of problems at the end of each chapter, many new for this edition, including 'chapter integration' and 'concept map' problems to aid revision and keep educationalists happy. Example problems are present and, new for this edition, 'unpacking the problem' exercises give hints for finding solutions. An annoying feature is the three-to-one ratio of unanswered to answered problems — and why is it always the tricky ones which don't have an answer in the back? The solutions exist, of course, but it is necessary to purchase a separate study guide to obtain them all, which will not be appreciated by puzzled students on tight budgets.

What else is new in this sixth edition? Presentation has been improved by the extended use of colour and subtle typographical and layout changes (tables are now highlighted in pastel shades) and the addition of many good new photographs. Updating of content has occurred throughout the book, but the major changes are concentrated, unsurprisingly, in those chapters dealing with fast-moving molecular genetic topics. The biggest improvements are in the molecular techniques chapters. These have been rewritten so that the logic of gene cloning strategies is now clearly apparent, including cloning by tagging, functional complementation and positional cloning as well as oligo design and ORF analysis. Reverse genetics, gene replacements and gene therapy are newly included and particularly welcome is an entirely new chapter on 'Genomics' describing strategies for mapping and sequencing whole genomes. The result of these changes is that the major techniques of modern molecular genetics are now very clearly outlined prior to discussion of more specific topics in the following chapters. In these subsequent chapters, developmental genetics has expanded with a new chapter on cell biology including such topics as cell cycle genes, the cytoskeleton, intercellular communication and the genetics of cancer. The genetics of pattern formation during development is now illustrated using *Drosophila* examples throughout, giving a more coherent treatment to this subject.

Several teaching aids complement the textbook. In addition to the study guide and a selection of illustrations on overhead transparencies, there is now also a CD-ROM available containing all the illustrations from the book, and an instructors' manual. These aids are available for purchase, although recognized tutors recommending the text may be able to obtain some of them free if their class size is sufficiently large (no problem then for teachers in UK universities).

It may not hold all the answers, but *An Introduction to Genetic Analysis* is an excellent text for undergraduate genetics teaching.

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Essential Genetics. Daniel L. Hartl. Jones and Bartlett, Massachusetts. 1996. Pp. 458. Price £17.95, paperback. ISBN 0 86720 883 X. **Genetics (3rd edn)**. Daniel L. Hartl. Jones and Bartlett, Massachusetts. 1994. Pp. 584. Price £19.95, paperback. ISBN 0 86720 870 8.

The dedication in the 1994 third edition of the excellent textbook *Genetics* by Hartl is 'This is Christopher's book'. The dedication in the 1996 *Essential Genetics* is 'This too is Christopher's book'. The puzzle that I set about trying to solve is 'Why would Christopher want a copy of *Essential Genetics* if he already has a copy of *Genetics*?' In content the two books are very similar. But *Genetics* is a bit longer and has chapters on 'Extranuclear Inheritance',