
Book Reviews

Suzuki, D.T.; Griffiths, J.F.; Lewontin, R.C.: An Introduction to Genetic Analysis. 2. Ed. San Francisco: W.H. Freeman 1981. 911 pp., 687 figs., Hard bound \$ 22.95

This comprehensive and informative textbook is clearly written and is illustrated with many diagrams which effectively simplify concepts presented in the text. Some line drawings and pictures show not only how techniques in modern and classical genetics are performed but also some simple microbiological techniques. The authors adopted a historical approach to teaching genetics. Therefore the reader has the possibility, and is actually forced to rediscover the whole of genetics. This fashion of teaching genetics emphasizes the analytical aspect, as the title implies, but is very time consuming.

Starting with a very general introduction to the importance of genetics and a chapter on modification, the principles of segregation and linkage in eukaryotes are presented, and in the chapter "Advanced transmission genetics" mapping functions, tetrad analysis and mapping of human chromosomes follow; then there are chapters on mutation and recombination in bacteria and viruses. Only in chapter 11 (p. 425) is the structure of DNA described. Among others the chapter on "Manipulation of DNA" is particularly up-to-date,

and in the chapter "Mechanism of genetic change" the molecular insights in gene mutation, recombination and transposable elements are dealt with. Excellent chapters on developmental, quantitative and population genetics complete the text. Some unclear or erroneous diagrams like that on chromosomal transfer and recombination in conjugation and the gaps between codewords should be revised in the third edition.

The book contains questions and problems and answers are available in a separate "Solution Manual ...". A separate "Instructors Guide ..." was prepared by R. J. Robbins. Besides a few errors (for example p. 48/6, 49/9) some questions are not suitable for education: It is impossible to perform a transformation experiment as described on page 48/6, and in question 9 page 34 it seems as if a tetratype could only arise if the genes are linked.

Critical comments notwithstanding, the textbook excellently describes all topics of general genetics and will be very useful for learning facts and understanding genetic research. However, in my opinion it is better to integrate classical genetics and molecular genetics as much and as soon as possible in the teaching process.

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