From Genes to Genomes

Concepts and Applications of DNA Technology

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Rapid advances in a collection of techniques referred to as gene technology, genetic engineering, recombinant DNA technology and gene cloning have pushed molecular biology to the forefront of the biological sciences. *From Genes to Genomes: Concepts and Applications of DNA Technology* will explain key ideas underlying the most central techniques in the context of the ways in which they are used.

Opening with a brief review of the basic concepts of molecular biology, the book moves on to describe key molecular methods and how they fit together. This ranges from the cloning and study of individual genes to the sequencing of whole genomes, and the analysis of genome-wide information. Finally, the book considers some of the applications of these techniques in biotechnology, medicine and agriculture, as well as in research that is driving the current explosion of knowledge across the biological sciences.

From Genes to Genomes
Concepts and Applications of DNA Technology:

- Introduces key techniques and concepts involved in cloning genes and in studying their expression and variation.
- Provides an accessible introduction to genome sequencing and bioinformatics.
- Includes full two-colour design used throughout.