

In this third edition of his popular undergraduate-level textbook, Desmond Nicholl recognises that a sound grasp of basic principles is vital in any introduction to genetic engineering. Therefore, as well as being thoroughly updated, the book also retains its focus on the fundamental principles used in gene manipulation. The text is divided into three sections: Part I provides an introduction to the relevant basic molecular biology; Part II, the methods used to manipulate genes; and Part III, applications of the technology. There is a new chapter devoted to the emerging importance of bioinformatics as a distinct discipline. Other additional features include text boxes, which highlight important aspects of topics discussed, and chapter summaries, which include aims and learning outcomes. These, along with key word listings, concept maps and a glossary, will enable students to tailor their studies to suit their own learning styles and ultimately gain a firm grasp on this subject that students traditionally find difficult.

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"An easy to follow narrative, accompanied by simple, clear diagrams, provides the interested student with the background needed . . . the book, therefore, fills an important niche and should be brought to the attention of upper-level undergraduate students and beginning graduate students in any branch of biology that makes use of molecular techniques."

—ASM News

"... easy to read, clear and well organised . . . I certainly recommend it for all sixth-form libraries. In addition, this is an accessible but comprehensive basic text for the undergraduate to use."

—Pauline Lowrie, Biology

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Cover image: DNA molecule. Blurred computer artwork of a deoxyribonucleic acid (DNA) molecule. DNA is composed of two sugar-phosphate strands twisted into a double helix. Between the strands are nucleotide bases. There are four different bases: guanine, cytosine, thymine and adenine. DNA contains sections called genes, which encode the body's genetic information.

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