## **Table of Contents**

- 1 Introduction
- Part I The Basis of Genetic Engineering
- 2 Introducing molecular biology
- 3 Working with nucleic acids
- 4 The tools of the trade
- Part II The Methodology of Gene Manipulation
- 5 Host cells and vectors
- 6 Cloning strategies
- 7 The polymerase chain reaction
- 8 Selection, screening and analysis of recombinants
- 9 Bioinformatics
- Part III Genetic Engineering in Action
- 10 Understanding genes, genomes and 'otheromes'
- 11 Genetic engineering and biotechnology
- 12 Medical and forensic applications of gene manipulation
- 13 Transgenic plants and animals
- 14 The other sort of cloning
- 15 Brave new world or genetic nightmare