
CONTENTS IN BRIEF

- 1 CELLS AND TISSUES, 1
- 2 WATER AND MACROMOLECULES, 17
- 3 MEMBRANES AND ORGANELLES, 43
- 4 DNA STRUCTURE AND THE GENETIC CODE, 53
- 5 DNA AS A DATA STORAGE MEDIUM, 67
- 6 TRANSCRIPTION AND THE CONTROL OF GENE EXPRESSION, 81
- 7 RECOMBINANT DNA AND GENETIC ENGINEERING, 99
- 8 MANUFACTURING PROTEIN, 123
- 9 PROTEIN STRUCTURE, 137
- 10 INTRACELLULAR PROTEIN TRAFFICKING, 157
- 11 HOW PROTEINS WORK, 175
- 12 ENERGY TRADING WITHIN THE CELL, 191
- 13 METABOLISM, 207
- 14 IONS AND VOLTAGES, 229
- 15 INTRACELLULAR SIGNALING, 251
- 16 INTERCELLULAR COMMUNICATION, 269
- 17 MECHANICAL MOLECULES, 283
- 18 CELL CYCLE AND THE CONTROL OF CELL NUMBER IN EUKARYOTES, 297
- 19 THE CELL BIOLOGY OF THE IMMUNE SYSTEM, 315
- 20 CASE STUDY: CYSTIC FIBROSIS, 329