

Contents to the Second Edition

<i>Preface to the Second Edition</i>	ix
Chapter 1 Introduction	1
Chapter 2 Basics of Protein Structure	11
Chapter 3 The Folding, Folds and Functions of Proteins	37
Chapter 4 Basics of Membrane Proteins	69
Chapter 5 Basics of Nucleic Acid Structure	105
Chapter 6 Basics of Lipids and Membrane Structure	161
Chapter 7 Basics of Carbohydrates	213
Chapter 8 Enzymes	227
Chapter 9 Genome Structure, DNA Replication and Recombination	269
Chapter 10 Transcription	307
Chapter 11 Protein Synthesis — Translation	351
Chapter 12 Protein Folding and Degradation	385
Chapter 13 Transmembrane Transport	425
Chapter 14 Signal Transduction	451
Chapter 15 Cell Motility and Transport	481
Chapter 16 Structural Aspects of Cell-Cell Interactions	507
Chapter 17 The Immune System	521

Chapter 18	Virus Structure and Function	535
Chapter 19	Bioinformatics Tools in Structural Biology	553
	<i>Index</i>	577