APPENDIX CLEROTEINS PERFORM MULTIPLE PUNCTIONS: ENZYMES, RECEPTORS, 10N CHANNELS 263

APPENDIX DUTHE BASICS OF DRUG DISCOVERY AND DEVELOPMENT 271

APPENDIX E: STRUCTURES OF KEY MOLECULES 183

FINDER 308

Contents

Preface ix
Previous Edition Preface xi
Acknowledgments xv

- 1. Seduced by drug discovery 1
- 2. Proscar and Propecia: the Gary and Jerry show 7
- 3. Basic research, snake venoms, and ACE inhibitors: Ondetti, Cushman, and Patchett 25
- 4. HIV protease inhibitors: weapons in the war against HIV/AIDS 39
- 5. Statins: protection against heart attacks and strokes—hallelujah! 61
- 6. The perils of Primaxin 85
- 7. The discovery of taxol: Wall, Horwitz, Holton 103
- 8. Avermectins: molecules of life battle parasites 121
- 9. Fludalanine: nice try but no hallelujah 139
- 10. Diabetes breakthroughs: Thornberry and Weber 153
- 11. Take it off! Take it all off! Drugs for weight reduction 187
- 12. The conquest of hepatitis C: telaprevir and beyond 217

APPENDIX A: THE SMALL MOLECULES OF LIFE: SOME BASICS OF

CHEMISTRY 245

APPENDIX B: THE BASICS OF PROTEIN STRUCTURE 253

APPENDIX C: PROTEINS PERFORM MULTIPLE FUNCTIONS: ENZYMES,

RECEPTORS, ION CHANNELS 263

APPENDIX D: THE BASICS OF DRUG DISCOVERY AND DEVELOPMENT 271

APPENDIX E: STRUCTURES OF KEY MOLECULES 283

NOTES 297

INDEX 305

Contents

Previous Edition Preface xi Acknowledgments xv

- a. Seduced by drag discovery a
- z. Proseur and Properius the Cary and Jerry show 7
- 3. Basic research, smake venanus, and ACE inhibitors: Ondarts, Cushman, and Patchert 15
 - 4. If IV protesse inhibitions, weapons in the war against HIV/4IDS 39
 - s. Startins: protection against beart attacks and straker-ballelujab! 61
 - 6 The gerils of Primarily 85
 - g. The discourry of mosels Wall. Harmiss, Elokien uss
 - It is constituted and the parties of the parties and the parties and
 - g. Fluidalanine: nice my but no ballefujah 139
 - to. Disheres breaksbroughs: Thornberry and Heher 153
 - en Take it off? Take it all off? Drugs for weight reduction 187
 - ra. The conquest of hepatitis C: telaprevir and beyond 227

VELERNDIX V: LHE RWYLT WOFECITES OF LIET: ROWE BYRICE OF

V HEMISTRY LAS

APPENDIX BY THE BASICS OF PROTEIN STRUCTURE 253