

Preface

This case study book provides an opportunity for integrative thinking in the areas of physiology, pathophysiology, and pharmacy. It provides students with an early introduction to the case-based nature of their future careers as practicing pharmacists and health care professionals. The cases are straightforward and short, and they are written at a level appropriate for student pharmacists in the first professional year of study. Written primarily as a review of fundamental physiological principles, these cases are also designed to illustrate the physiological basis of medicine and pharmacotherapeutics as well as to strengthen problem-solving skills.

The book is intended as a supplemental text for courses in physiology, anatomy & physiology, and pathophysiology. Each case study includes objective questions, which are new to this edition, and short answer questions. The book begins with case studies related to cellular physiology and the immune system. These are followed by cases involving the cardiovascular, respiratory, digestive, renal, and endocrine systems. In this second edition of the book, the chapter on the endocrine system also includes new case studies involving the reproductive system. These chapters are followed by the nervous system, including the brain, spinal cord, autonomic nervous system, and pain. The book then concludes with cases concerning muscle physiology and a new chapter on the skeletal system. Finally, an appendix provides brief descriptions of various diagnostic tests mentioned in some of the case studies.