

A D V A N C E D

# Pathophysiology

*Application to  
Clinical Practice*

MAUREEN GROER

Lippincott

An abstract graphic design on a dark blue background. It features a large, semi-transparent red circle in the center. Overlapping the bottom-left of the circle is a dark blue square. To the right of the square, a cluster of small, semi-transparent blue spheres is arranged in a pattern that suggests a molecular or cellular structure. The overall aesthetic is scientific and modern.



# Advanced Pathophysiology

*Application to Clinical Practice*

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# **Advanced Pathophysiology**

*Application to Clinical Practice*

# Dedication

*This book is dedicated to my parents,  
Floyd and Dorothy Wimberly, who have, throughout my life,  
inspired, encouraged, and motivated me to  
question the obvious, search for the hidden, and  
challenge the limits of my own possibilities.*



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# Preface

**T**his book was written in response to an obvious and significant gap in the educational resources available to teach pathophysiology to primary care health care provider students. The types of disorders seen in primary care patients tend to be vastly different than what is commonly covered in graduate pathophysiology textbooks. There is little available in these books on the pathophysiologic bases of common acute and chronic disorders such as is covered in this book. As a teacher of pathophysiology to graduate nurse practitioner students for nearly 25 years, this gap became more and more of a problem for me and the students. While it was essential that the student understand the health problems seen in primary care practice in much more depth, the books did not sufficiently cover the information, and many additional readings were required. The impetus for writing this book came from these experiences.

The aim of the book is to provide current, in-depth pathophysiology of common health problems. The approach is at genetic, molecular, cellular, tissue and organ levels. The major illnesses that primary care providers will treat are discussed as separate chapters in some cases, such as with diabetes, hypertension, or skin cancer. Other chapters describe common disorders within particular organ systems. The goal is not to be comprehensive, but to nevertheless be sufficiently broad enough to cover the usual, routine, common acute and chronic health problems that a provider would likely see on a regular basis in the office.

The book also seeks to provide a holistic perspective of the ill person. Illness is thus viewed in a multidimensional way, with attention paid to the impact of behavior, personality, stress, and coping on the etiology, progression, and outcome of various illnesses.



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