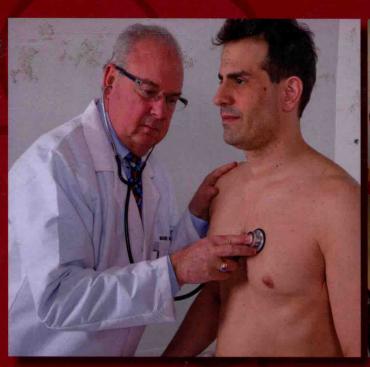
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SEVENTH EDITION

TEXTBOOK OF

Physical Diagnosis

HISTORY AND EXAMINATION

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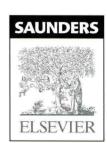
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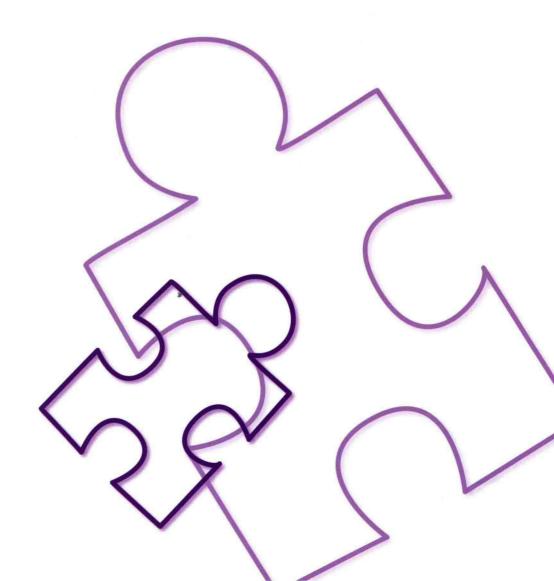
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Textbook of Physical Diagnosis



One of the essential qualities of the clinician is interest in humanity, for the secret in the care **of** the patient is in caring **for** the patient.

Francis Weld Peabody (1881–1927)

To Vivian Hirshaut, MD,

my wife, my life's companion, and my best friend, for her love, patience, support, and understanding;

To Talia H. Swartz, MD, PhD,

my loving and brilliant daughter, for her encouragement and sustained devotion;

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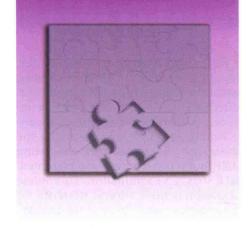
my wonderful son-in-law, who helped produce two of the most delightful granddaughters anyone could wish for;

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To the memory of my parents, Hilda and Philip;

and

To my **students**, from whom I am always learning.



PREFACE

This is the seventh edition of the *Textbook of Physical Diagnosis: History and Examination*, which, like its predecessors, has been written for students of health care who are learning to communicate effectively with patients, examine patients, and assess patients' medical problems. Although 25 years have passed since the publication of the first edition, this text still offers a unique, comprehensive (but concise) approach to physical diagnosis. By discussing pathophysiology of disease and emphasizing the humanistic element of health care, I attempt to show the importance of the old-fashioned doctor's approach to the patient. "The *primary* aim of this textbook," as stated in the preface to the first edition, "is to provide a framework for the clinical assessment of the patient in a *humanistic* manner." The book, then and now, focuses on the patient: his or her needs, problems, and concerns.

The history and physical examination must not be seen as procedures performed by a robot but rather as a process that requires interpersonal awareness and technical skill. In this era of extraordinary advances in diagnostic modalities, procedures and tests have been emphasized, whereas the importance of the history and physical examination has been minimized. It is well known, however, that among the most valuable and least costly medical evaluations are the history and physical examination. This book focuses on how to offer the best medical care through the art of effective interviewing and physical examination.

The seventh edition represents a **major revision** based on a complete review of the field of physical diagnosis. The chapters have been reviewed and modified where appropriate. Extensive changes have been made to many chapters. As times change, so do standards of physical diagnosis. Several of the tests indicated in the previous editions have been either modified or eliminated.

Included with this print text is an **accompanying website on Student Consult** (studentconsult.com*), which is an online interactive learning platform that presents a vast collection of popular Elsevier textbook titles with a wide variety of ancillary materials. The website features fully searchable text; integration links that will seamlessly connect the user to additional and related content in other Student Consult titles; an image library, with figures that can be easily downloaded into PowerPoint; and supplementary material such as audio or video clips. Users can gain access to the online version of this book by going to http://www.studentconsult.com and entering the unique PIN code provided on the inside front cover of this book.

In trying to keep up with the needs of the readership and recognizing that many readers place a premium on portability and accessibility in textbooks, this edition introduces several changes. The print book has been made **much smaller** than the previous edition by moving select material to the online version of the text, available on Student Consult. All of the chapters on history-taking and the physical examination remain in this printed edition, but the chapters on the focused history and physical examination (Chapter 26), cultural diversity (Chapter 27), alternative and complementary medicine (Chapter 28), nutrition (Chapter 29), the epilogue (Chapter 30), and all the appendices are found exclusively on Student Consult.

The DVD-ROM that previously accompanied this book has also been eliminated, and the **content can now be streamed directly from Student Consult**. These high-quality videos contain step-by-step demonstrations of the complete physical examination of the man and of the breast and pelvic examinations of the woman. They also illustrate the pediatric

^{*}See the inside front cover for a full description of this site and instructions for activation.

examinations of the newborn and the toddler and the neurologic evaluation of the toddler. Using standardized patients, the video presentation shows history-taking with an adolescent and her mother and interviewing techniques regarding sensitive topics with a geriatric patient. These sensitive topics include a discussion of advance directives (i.e., health care proxy determination and living wills), a mental status examination of a patient with a cognitive impairment, and a scenario showing how to give bad news. Finally, scenarios demonstrating the focused history and physical examination of a young man with abdominal pain, counseling a woman about health-related issues, and a pediatric telephone consultation are presented. These are very useful scenarios for preparing for the USMLE Step 2CS Examination. This online resource, coupled with the printed textbook, provides a comprehensive clinical reference for the understanding of the organization and fluidity of the complete assessment of the patient.

Another new and unique feature of this edition is the **use of QR codes** throughout the book. *QR codes*, short for *quick response codes*, are optical machine-readable labels attached to items that record information related to the item.* Users with a camera phone equipped with the correct reader application can scan the image of the QR code in this textbook to open a web page with a selected video or another URL. For example, **when reading about a certain physical examination technique**, **the reader can scan the QR code associated with that maneuver and actually watch how that specific examination is performed while reading the text**.

QR codes can be used on iOS[†] devices and Google's Android operating system, with Google Goggles[‡] and third-party barcode scanners. At the time of publication, Apple's iOS did not natively include a QR code reader, but more than 50 free and paid apps were available with the ability both to scan the codes and to link to an external URL.§

The references at the end of each chapter have all been completely updated and provide information for further study. To reduce the size of the textbook, all of the references have been removed from the printed textbook and now can be accessed via Student Consult. Thus, the reader will be able immediately to access up-to-date information on a smartphone, iPod, or iPad!

Illustrations are an integral part of a physical diagnosis textbook. They help the reader better understand the pathologic processes. As in the previous editions, the book is richly illustrated, with more than 950 photographs and line art. More than 80% of the photographs of pathologic conditions are original; they have not been reprinted from other textbooks. In this new edition, most of the original **black-and-white images** demonstrating the techniques of the examination have been **replaced with 4-color images**.

Any health care provider today must be able to synthesize basic pathophysiology with humanistic medical care. As the medical profession continues to be under great scrutiny, we must emphasize an empathetic approach to patient care, recognizing the role of culture in illness and using modern technology to *enhance* our clinical assessment, not to replace it. We must always remember that a patient is a *person* suffering from disease, not a vehicle for a disease!

I hope that you will find this seventh edition of *Textbook of Physical Diagnosis: History and Examination* to be reader friendly, comprehensive, and an exciting addition to your library.

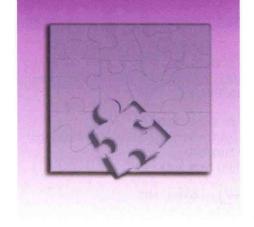
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ShopSavvy, Inc. and TapMedia, Ltd., among other companies, have free QR code readers for iPhone, iPod, and iPad. Google Goggles is an example of one of many applications that can scan and link URLs for iOS. With BlackBerry devices, the App World application can natively scan QR codes and load any recognized URLs on the device's browser. Windows Phone 7.5 is able to scan QR codes through the Bing search app. It takes around 1 minute for someone with an iPhone or Android phone to find and install a QR code reader.



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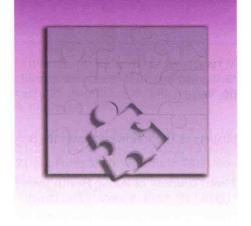
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Mark H. Swartz, MD



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- 5-129B: From Nzuzi SM: Common nail disorders. Clin Podiatr Med Surg 6:273, 1989.

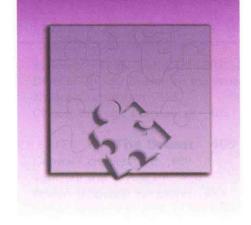
5-108: From Kosinski MA, Stewart D: Nail changes associated with systemic disease and vascular insufficiency. *Clin Podiatr Med Surg* 6:295, 1989.

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