

SECOND EDITION

Fundamentals of the Physical Therapy Examination

Patient Interview and Tests & Measures

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Production Credits

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Composition: Cenveo® Publisher Services
Project Management: Cenveo Publisher Services

Cover Design: Scott Moden
Director of Rights & Media: Joanna Gallant
Rights & Media Specialist: Jamey O'Quinn
Media Development Editor: Troy Liston
Cover Image: Courtesy of Stacie Fruth
Interior images: All photographs, unless otherwise noted,
courtesy of Stacie Fruth.
Printing and Binding: RR Donnelley
Cover Printing: RR Donnelley

Library of Congress Cataloging-in-Publication Data

Names: Fruth, Stacie J., author.
Title: Fundamentals of the physical therapy examination : patient interview and tests & measures / Stacie J. Fruth.
Description: Second edition. | Burlington, MA : Jones & Bartlett Learning, [2018] | Includes bibliographical references and index.
Identifiers: LCCN 2016047285 | ISBN 9781284099621 (spiral bound : alk. paper)
Subjects: | MESH: Physical Therapy Modalities | Physical Examination | Medical History Taking | Professional-Patient Relations
Classification: LCC RM701 | NLM WB 460 | DDC 615.82—dc23
LC record available at <https://lcn.loc.gov/2016047285>

6048

Printed in the United States of America
21 20 19 18 17 10 9 8 7 6 5 4 3 2 1

*To all who have appreciated, supported, encouraged (or, at minimum, tolerated)
my relatively strong tendencies toward being a nonconformist, rule bender,
boat rocker, boundary pusher, outside-the-lines colorer, status quo
challenger, and despiser of the phrase “because we’ve always
done it that way”...thank you for dancing with me.
Let's turn the music up!*

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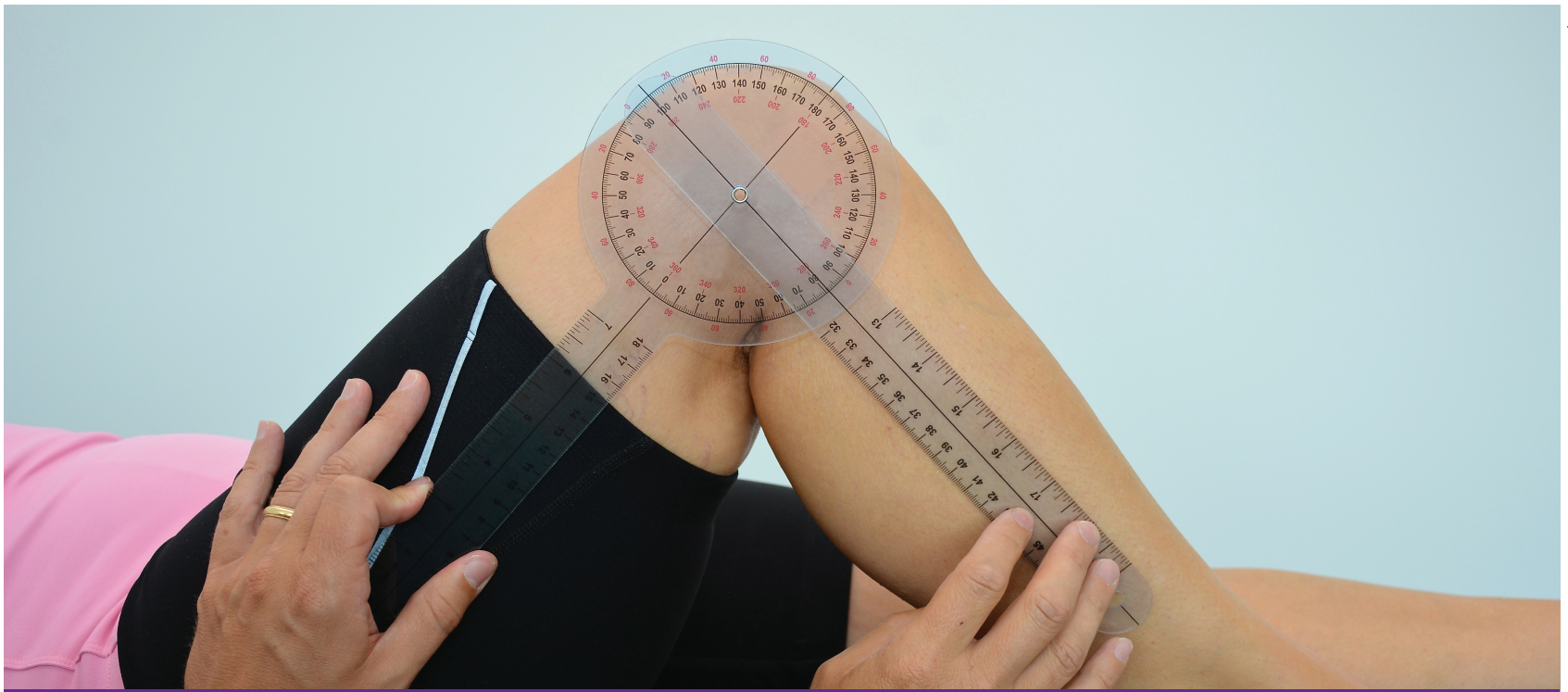
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Preface

It's now been 12 years since I embarked on my journey into academia and took on the course sequence titled Generic Examination I and II in the Doctor of Physical Therapy program at the University of Indianapolis. The name of those courses drove me crazy (until we changed them several years later), but I was thrilled to have the opportunity to teach that content: the “generic” skills required to conduct a basic physical therapy examination with a wide variety of patients. Teaching the clinical stuff is fun, right? But then came the realization that I was responsible for teaching content that would affect each student's ability to perform one of the most vital components of a physical therapist's practice: a thorough, concise, and meaningful patient examination.

Despite an extensive search for a textbook I could use in these courses, not one title emerged. Not one. There were several texts that covered advanced tests and measures, and others that dealt with examination techniques specific to a certain genre of patients. But it seemed as though nothing existed that covered the skills necessary for a novice student to learn the art and science of conducting both the interview and the tests/measures components of an initial examination with a variety of patients. So, I simply started creating my own. What began as a 38-page course packet aimed at providing students with rudimentary “how to” information gradually evolved into something that loosely resembled a

textbook (always with a purple cover, for those who are curious). And then—this part is blurry—the first edition of *Fundamentals of the Physical Therapy Examination* happened.

Let me tell you how odd it is to reference your own textbook while you're teaching—to see students leaf through the pages of text and pictures you somehow put together. That said, it is a hair comforting to know that no one knows the content of the textbook you're using better than you! The feedback (both positive and less) I got from my students about the first edition was incredibly valuable. I also received great input about the content, layout, and utility of the text from students and faculty across the country, and every bit of that feedback was considered when the second edition was written.

The essential purpose of *Fundamentals of the Physical Therapy Examination: Patient Interview and Tests & Measures* has not changed from the first edition: provide novice-to-intermediate students of physical therapy with a resource that can be used both in the classroom and in the clinic to help them learn methods of collecting meaningful verbal, observational, and measured data from any patient, regardless of setting or diagnosis. It is also designed as a resource for physical therapy faculty who, like me, had been searching for a text that covers this broad content in a classroom-friendly way. This text is intended for active use! Students

are encouraged to highlight content, write notes in it, frequent the online resources to watch the how-to videos, and take it along during clinical experiences. Faculty are encouraged to use the multitude of short case examples as classroom talking points, utilize the step-by-step instructions of how to perform each test/measure (while emphasizing the need to adapt based on individual patient needs), and show the accompanying technique-based videos to complement classroom instruction.

What makes this text different from most is that it does not ask the reader to learn methods of examining a particular body region or a specific condition. Instead, common interview questions and a myriad of physical tests/measures are described, and the reader is asked to consider which questions and which tests/measures are appropriate for *any* given patient. As experienced clinicians well know, “text-book” patients are few and far between. Physical therapists must have the knowledge and confidence to assess problems or conditions that may be outside any given patient’s presenting diagnosis. This text encourages students to understand that it is never too early to learn this essential skill of clinical decision making.

The first chapter of this text describes the global concepts and content of the remaining chapters, which are presented in two interrelated parts. Part I (Laying a Solid Foundation) focuses on what many clinicians would argue is the most important part of the patient examination: the initial interview. Chapters 2 and 3 discuss the vital aspects of creating rapport and an environment of trust, using a variety of communication tools, understanding the influence of biopsychosocial and cultural factors, recognizing personal biases, and appreciating the need to meet patients where they are. Chapter 4 then provides a thorough description of categories, types, and examples of interview questions. A “priority/possible/pointless” clinical decision-making system is introduced, encouraging and empowering students to embrace this essential component of an autonomous profession.

Part II (Building on the Foundation) begins with a chapter describing the transition from patient interview to performance of tests and measures. Emphasis is placed

on the importance of using information gathered from the interview to guide decisions about which tests/measures are appropriate. The remaining chapters describe the purposes and techniques of fundamental tests and measures commonly utilized in patient examinations, organized in a combined body system/patient condition manner. The priority/possible/pointless system is carried through each chapter, encouraging even novice clinicians to make clinical decisions about which tests/measures are essential and which ones may be unnecessary.

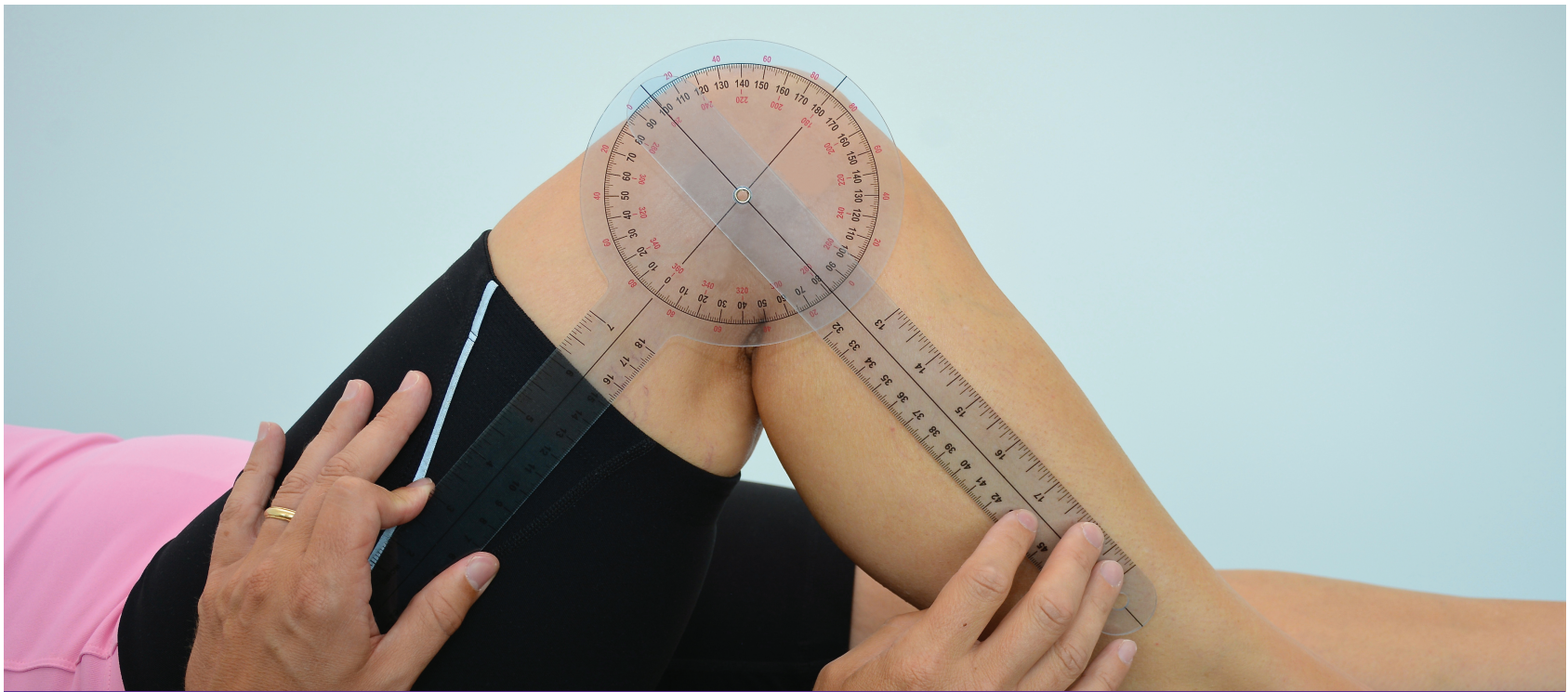
Brief case examples, accompanied by sample documentation, enable the reader to understand each test/measure in the context of a patient scenario. These cases, provided after each test/measure, are purposefully short and focused to help the reader learn how information gathered from the patient leads to the selection of particular tests/measures and documentation of the findings. Novice learners, in my experience, benefit from small, manageable examples that can later be understood in a broader sense. Even so, it is sometimes helpful to see the big picture. Therefore, I’ve included three complete cases, each describing a different genre of patient, which are woven through this edition.

Most students of physical therapy are visual or kinesthetic learners. The most requested study aid from my students has been pictures and videos of the techniques covered in class. Therefore, this text is laden with photos, and its online resources house multiple videos that demonstrate most of the tests/measures described. In addition, videos of two complete initial examinations are provided. Students may find these helpful to obtain a “big picture” view of the examination process; instructors may find it helpful to use portions of these videos to highlight particular aspects of a typical patient examination.

Finally, my love and enthusiasm for teaching this content has only grown in the past 12 years, and I hope this is conveyed throughout the text. I also hope you find this text easy and enjoyable to read and, above all, one that is truly an asset on your journey toward becoming a confident, skilled, and successful physical therapist who finds as much reward in this profession as I have.

Includes Video Access!

New copies of *Fundamentals of the Physical Therapy Examination: Patient Interview and Tests & Measures, Second Edition* include access to an extensive array of online videos demonstrating the “how to” for a wide variety of fundamental physical therapy tests and measures, such as gross strength testing, various sensory tests, reflex assessment, and examples of a number of abnormal gait patterns. Also included in the videos are two complete patient examinations (interview and tests/measures), one orthopedic and one neurological.



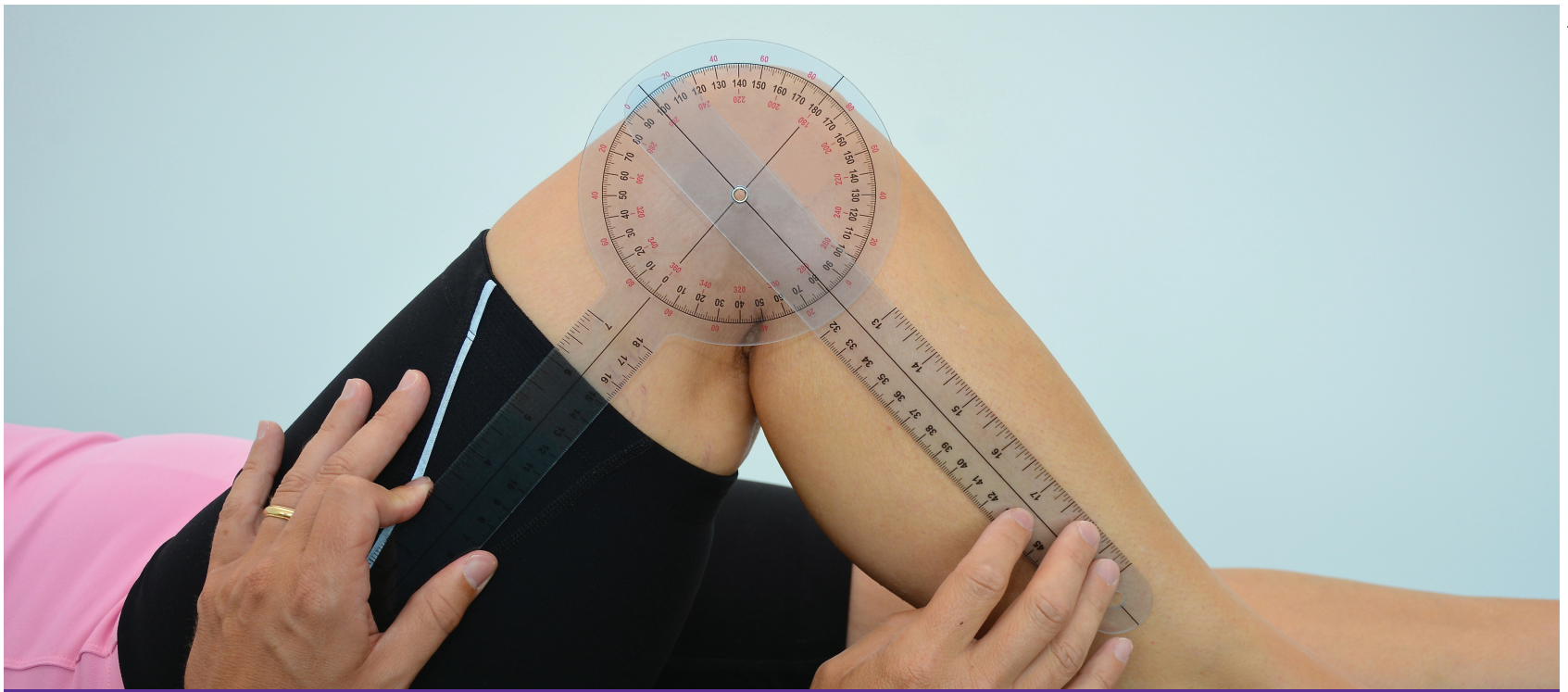
New to This Edition

After seeking a great deal of feedback from both students and faculty, I have made some changes to the content and organization of the text for this second edition. The most common question (or request) I received was regarding content specific to goniometry and manual muscle testing. I purposely had not included those items in the first edition, recognizing that entire textbooks were dedicated to each one of those content areas. However, multiple faculty members encouraged me to include the basic material necessary to inform students about those techniques so that, in some cases, the need for three textbooks could be reduced to one.

In addition, students encouraged me to include more full case examples, so I opted to use three. These are first introduced at the end of Chapter 4 as documentation examples of an initial interview, then carried forward into each chapter with documentation specific to the chapter's content reflected in documentation format. The documentation excerpts are then pulled together as three full case examples in Appendix A.

The following is a more detailed list of all new or updated content in this edition:

- Updated all content related to the *Guide to Physical Therapist Practice* to reflect the revised 3.0 edition
- Placed additional emphasis on the importance of the therapist–patient relationship
- Added a section about motivational interviewing
- Added two documentation examples of the Interview (Subjective) portion of the exam at the end of Chapter 4, for a total of three examples
- Carried those three cases through the rest of the text, adding documentation examples of the Test & Measures specific to each case (summary notes for each example at the end of Chapters 6–10)
- Added information about the Systems Review to be consistent with the *Guide 3.0*
- Moved Posture and Gait content from Chapter 9 (Musculoskeletal Examination) to Chapter 6 (Global Observation, Mental Functions, and Components of Mobility and Function) to reflect that these exam techniques are conducted on most patients
- Added a section in Chapter 6 on Mobility and Locomotion to be consistent with the *Guide 3.0*
- Added Goniometry to Chapter 9
- Added Manual Muscle Testing to Chapter 9
- Moved Dermatomes, Myotomes, and Deep Tendon Reflexes from Chapter 9 to Chapter 10 under the section heading “Spinal Nerve Root Integrity”
- Added the Pronator Drift test as part of the Upper Motor Neuron tests section in Chapter 10
- Added an Appendix that contains the complete documentation examples introduced in Chapter 4 and then carried through Chapters 6–10



Acknowledgments

Countless individuals deserve my gratitude for their contributions to what is now the second edition of *Fundamentals* (or the “Purple Book,” as it’s known to every one of my students), and I can’t hope to formally thank all of them. Some, however, have taken a specific role in moving the text forward from its prior version to what I hope is “new and improved.”

I am indebted to those at Jones & Bartlett Learning, particularly my editorial and production team, for having continued faith in my vision for this book.

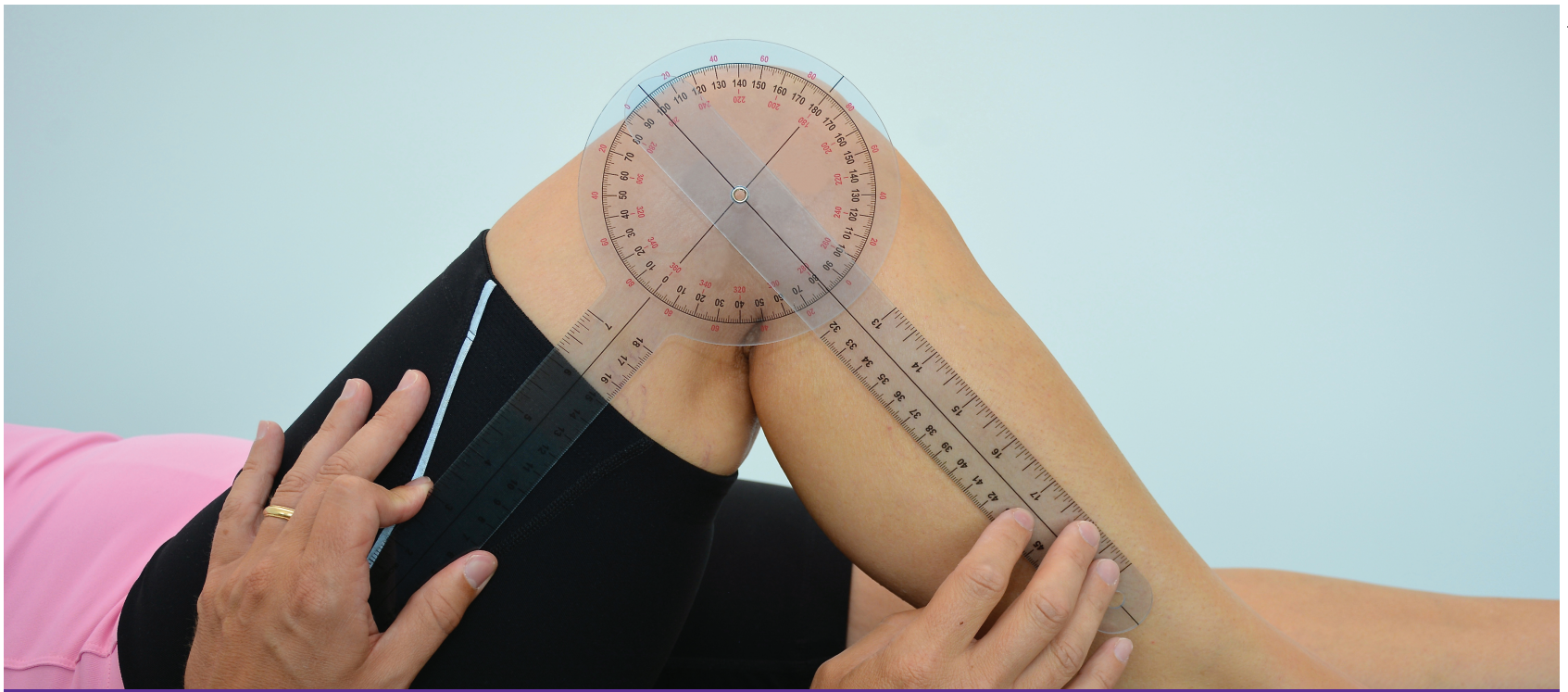
Several of my Krannert School of Physical Therapy colleagues offered substantial time and/or talent in the creation of this edition. I sincerely thank Steve Wiley, PT, PhD, GCS, for his contributions to the new content in Chapter 6 as well as the new goniometry photographs. Thanks to Anne Mejia-Downs, PT, PhD, MPH, and Emily Slaven, PT, PhD, OCS, FAAOMPT, Cert. MDT, for spending many hours serving as models in more than 200 new goniometry and manual muscle testing photographs. In addition, your support, counsel, and friendship made this second edition journey dramatically more tolerable. And to Renée Van Veld, PT, MS, who randomly read, suggested, photo modeled, brainstormed, and, without a doubt, provided the steadiest

stream of encouragement . . . thank you for the many hours of laughter, perfectly timed hugs, frequent indulgence in Mexican food (and drink), and unconditional support. Your friendship is one of the greatest blessings in my life.

I am also grateful to many of my former and current students for the assistance they provided. Some edited, some served as photo models, some offered creative ideas, and some assisted with creation of the ancillary material. Specific thanks goes to Daniel Batteiger, Allison Colligan, Troy Davis, Allison Everetts, Tim Malone, Kira Naegeli, Brian Ragano, Brooke VerSteeg, Rachel Waffle, and Jamie Wallace.

I would be remiss if I neglected to thank my UIndy colleagues, my friends, and random bystanders who agreed to be models for the multitude of new photographs in this edition.

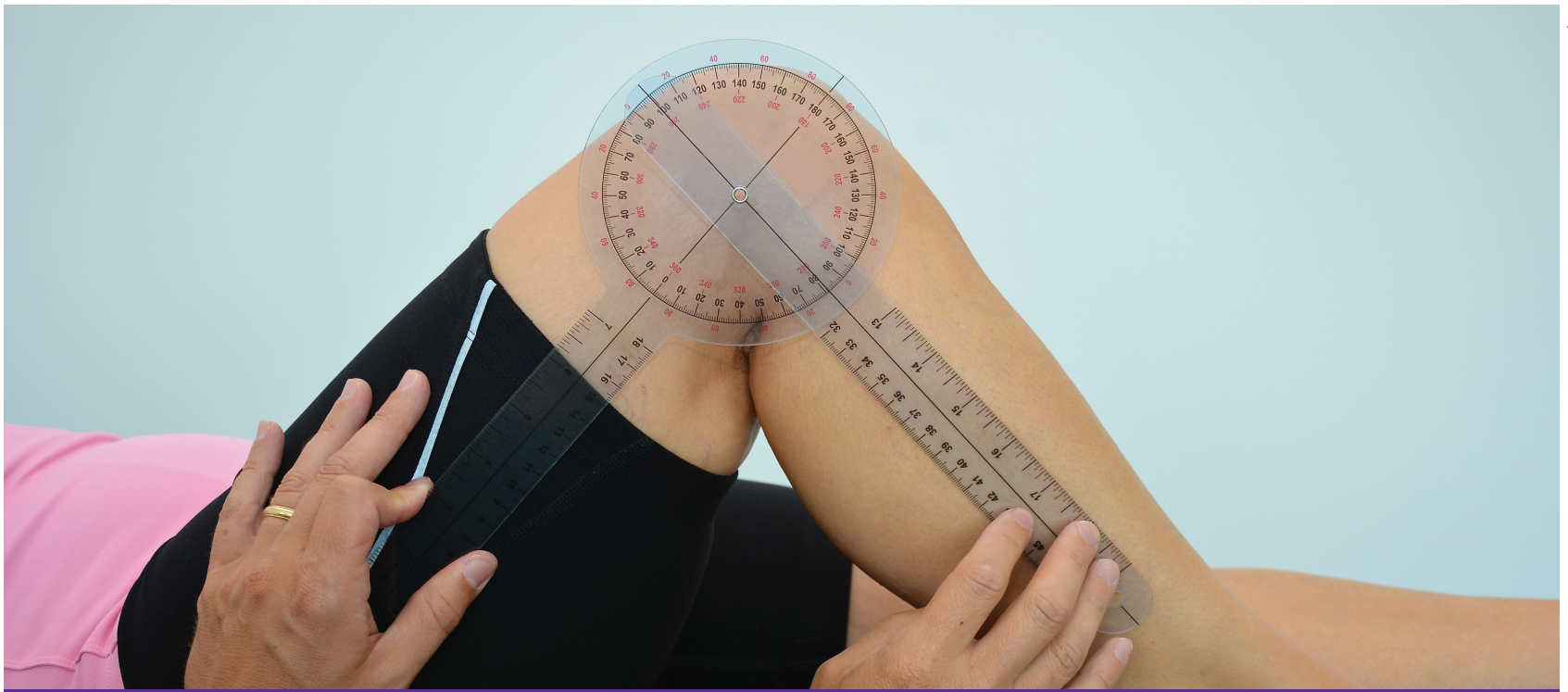
Finally, to my Krannert School of Physical Therapy family . . . I cannot hope to express what your support and friendship have meant to me over the past 12+ years. Without you, *Fundamentals* wouldn’t even exist. Collectively, you inspire, motivate, and humble me, and I simply cannot fathom finding another work family that will mean as much to me as you have. I love you all.



About the Author

Dr. Stacie J. Fruth is the founding chair and professor in the Department of Physical Therapy at Western Michigan University, where she is also the director of the Doctor of Physical Therapy program. Dr. Fruth received her Bachelor of Science degree in Kinesiology from the University of Michigan, her Master of Science degree in Exercise Science from the University of Massachusetts, her Master of Science degree in Physical Therapy from the University of Indianapolis, and her Doctor of Health Science degree from the University of Indianapolis. She also achieved Board Certification

as an Orthopedic Clinical Specialist in 2011. Since transitioning from full-time clinician to academia in 2003, Dr. Fruth has been responsible for teaching physical therapy students the fundamental clinical skills required for both patient examination and intervention. In 2009, Dr. Fruth received the Teacher of the Year award from the University of Indianapolis, where she served as a faculty member in the Krannert School of Physical Therapy for 12 years. Clinically, she has focused her practice in the emergency department of a Level I trauma hospital as well as in a pro bono clinic.



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