CONTENTS

List of Contributors . . . . . *ix*
About the Editors . . . . . *xiii*
Preface . . . . . *xv*
Acknowledgments . . . . . *xvii*
Introduction . . . . . *xix*

Section I The Basis of Injury Rehabilitation 1

Chapter 1 Essential Considerations in Designing a Rehabilitation Program for the Injured Patient 3
William E. Prentice

Chapter 2 Understanding and Managing the Healing Process Through Rehabilitation 23
Linda Stark Bobo and William E. Prentice

Chapter 3 The Evaluation Process in Rehabilitation 50
Darin A. Padua

Chapter 4 Psychosocial Considerations for Rehabilitation of the Injured Athletic Patient 82
Monna Arvinen-Barrow and Megan Granquist

Section II Achieving the Goals of Rehabilitation 101

Chapter 5 Establishing Core Stability in Rehabilitation 103
Barbara J. Hoogenboom, Amanda Benson, and Jolene L. Bennett

Chapter 6 Reestablishing Neuromuscular Control 127
Troy Blackburn, Scott Lephart, and C. Buz Swanik

Chapter 7 Regaining Postural Stability and Balance 151
Johna K. Register-Mihalik and Kevin M. Guskiewicz

Chapter 8 Restoring Range of Motion and Improving Flexibility 184
William E. Prentice

Chapter 9 Regaining Muscular Strength, Endurance, and Power 210
William E. Prentice

Chapter 10 Maintaining Cardiorespiratory Fitness During Rehabilitation 231
Patrick Sells and William E. Prentice

Section III The Tools of Rehabilitation 245

Chapter 11 Plyometric Exercise in Rehabilitation 247
Michael L. Voight, Linda Stark Bobo, and Steven R. Tippett

Chapter 12 Open vs Closed Kinetic Chain Exercise in Rehabilitation 269
Linda Stark Bobo and William E. Prentice

Chapter 13 Joint Mobilization, Traction and Mulligan Techniques in Rehabilitation 290
William E. Prentice

Chapter 14 Proprioceptive Neuromuscular Facilitation Techniques in Rehabilitation 313
Amanda Benson and William E. Prentice

Chapter 15 Aquatic Therapy in Rehabilitation 334
Barbara J. Hoogenboom, Amanda Benson, and Nancy E. Lomax

Chapter 16 Functional Progressions and Functional Testing in Rehabilitation 357
Michael McGee and Linda Stark Bobo

Section IV Rehabilitation Techniques for Specific Injuries 383

Chapter 17 Rehabilitation of Shoulder Injuries 385
Elizabeth Elder, Joseph B. Myers, Brett Pexa, Terri Jo Rucinski, William E. Prentice, and Rob Schneider

Chapter 18 Rehabilitation of Elbow Injuries 444
Sakiko Oyama and William E. Prentice

Chapter 19 Rehabilitation of Wrist, Hand, and Finger Injuries 471
Linda Stark Bobo and Anne Marie Schneider

Chapter 20 Rehabilitation of Groin, Hip, Thigh, and Pelvis Injuries 507
Doug Halverson and Bernard DePalma

Chapter 21 Rehabilitation of Knee Injuries 552
Michelle C. Boling, Darin A. Padua, and William E. Prentice

Chapter 22 Rehabilitation of Lower Leg Injuries 611
Doug Halverson and Christopher J. Hirth

Chapter 23 Rehabilitation of Ankle and Foot Injuries 640
Patrick O. McKeon, Erik A. Wikstrom, William E. Prentice, and Steven M. Zinder

Chapter 24 Rehabilitation of Injuries to the Spine 688
Daniel N. Hooker, Amanda Benson, and William E. Prentice

Chapter 25 Rehabilitation of Concussions 739
Kirsten J. Cunha and Keilea Sumrall

Glossary 769
Index 775