

Contributors ix

Foreword xiii

Preface xv

Acknowledgments xvii

PART I Overview of Sport Neuropsychology 1

- 1 Introduction to Sport Neuropsychology 1**
Frank M. Webbe
- 2 Qualifications and Training of the Sport Neuropsychologist 17**
Christopher M. Carr and Adam W. Shunk
- 3 Ethical Issues and Practical Considerations 35**
Shane S. Bush and Grant L. Iverson

PART II Sport-Related Concussion 53

- 4 History and Epidemiology of Concussion in Sport 53**
Tracey Covassin and R. J. Elbin
- 5 Sport as a Laboratory Assessment Model 75**
Jeffrey T. Barth, Daniel J. Harvey, Jason R. Freeman, and Donna K. Broshek
- 6 Diagnosis and Assessment of Concussion 91**
William B. Barr and Michael McCrea
- 7 Neuroimaging Techniques and Sports-Related Concussion 113**
Jamie E. Pardini, Luke C. Henry, and Vanessa C. Fazio
- 8 Evidence-Based Neuropsychological Assessment
in Sport-Related Concussion 131**
Grant L. Iverson
- 9 Effects of Repeated Concussive and Subconcussive
Impacts in Sport 155**
Luke C. Henry and Louis de Beaumont

- 10** Computerized Neuropsychological Assessment in Sport 173
Philip Schatz
- 11** Youth Sport Concussion: A Heads Up on the Growing Public Health Concern 187
Rosemarie Scolaro Moser, Amanda Charlton Fryer, and Sheryl Berardinelli
- 12** Concussion Management Programs in College and Professional Sport 209
Jamie E. Pardini, Eric W. Johnson, and Mark R. Lovell
- PART III Counseling and Therapy Issues 235**
- 13** Counseling Athletes Within the Context of Neurocognitive Concerns 235
Angelica Escalona, Ali Esfandiari, Donna K. Broshek, and Jason R. Freeman
- 14** Short-Term and Extended Emotional Correlates of Concussion 251
Lynda Mainwaring
- PART IV New Directions in Sport Neuropsychology 275**
- 15** When Science and Politics Conflict: The Case of Soccer Heading in Adults and Children 275
Frank M. Webbe and Christine M. Salinas
- 16** Concussion Management and Neuropsychological Concerns from the Perspective of an Athletic Department 295
Eric A. Zillmer, Eugene Hong, Rebecca Weidensaul, and Michael Westerfer
- 17** Neuromotor Effects of Concussion: A Biobehavioral Perspective 325
Anthony P. Kontos and Justus Ortega
- 18** Neurocognitive Development in Children and the Role of Sport Participation 357
Phillip D. Tomporowski, R. Davis Moore, and Catherine L. Davis
- 19** Future Directions in Sport Neuropsychology 383
Frank M. Webbe