

Contents

I Foundations of Respiratory Care, 1

- 1 History of Respiratory Care, 2**
Patrick J. Dunne
- 2 Delivering Evidence-Based Respiratory Care, 18**
James K. Stoller and Ariel M. Modrykamien
- 3 Quality, Patient Safety, Communication, and Recordkeeping, 35**
Scott P. Marlow and Umur Hatipoğlu
- 4 Principles of Infection Prevention and Control, 59**
Michele Messam and Thomas G. Fraser
- 5 Ethical and Legal Implications of Practice, 81**
Anthony L. DeWitt
- 6 Physical Principles of Respiratory Care, 102**
Daniel F. Fisher
- 7 E-Medicine in Respiratory Care, 126**
Narciso E. Rodriguez, Albert J. Heuer, and Madhu Sasidhar
- 8 Fundamentals of Respiratory Care Research, 146**
Robert L. Chatburn

II Applied Anatomy and Physiology, 157

- 9 The Respiratory System, 158**
Crystal L. Fishman and Narciso E. Rodriguez
- 10 The Cardiovascular System, 209**
Narciso E. Rodriguez
- 11 Ventilation, 226**
Eduardo Mireles-Cabodevila and Robert L. Chatburn
- 12 Gas Exchange and Transport, 247**
Zaza Cohen
- 13 Solutions, Body Fluids, and Electrolytes, 269**
Daniel F. Fisher
- 14 Acid-Base Balance, 285**
Will Beachey
- 15 Regulation of Breathing, 308**
Will Beachey

III Assessment of Respiratory Disorders, 319

- 16 Bedside Assessment of the Patient, 320**
Richard H. Kallet
- 17 Interpreting Clinical and Laboratory Data, 345**
Richard H. Kallet
- 18 Interpreting the Electrocardiogram, 356**
Albert J. Heuer
- 19 Analysis and Monitoring of Gas Exchange, 369**
Michael A. Gentile, Albert J. Heuer, and Richard H. Kallet
- 20 Pulmonary Function Testing, 400**
Zaza Cohen
- 21 Review of Thoracic Imaging, 428**
Joseph T. Azok and James K. Stoller
- 22 Flexible Bronchoscopy and the Respiratory Therapist, 456**
Danai Khemasuwan and Atul C. Mehta
- 23 Nutrition Assessment, 474**
Jami E. Baltz

IV Review of Cardiopulmonary Disease, 493

- 24 Pulmonary Infections, 494**
Sarah A. Longworth, Steven K. Schmitt, and David L. Longworth
- 25 Obstructive Lung Disease: Chronic Obstructive Pulmonary Disease, Asthma, and Related Diseases, 514**
Enrique Diaz-Guzman and James K. Stoller
- 26 Interstitial Lung Disease, 540**
Jeffrey T. Chapman and Jason Bordon
- 27 Pleural Diseases, 554**
Charlie Strange
- 28 Pulmonary Vascular Disease, 570**
Adriano R. Tonelli and Raed A. Dweik
- 29 Acute Respiratory Distress Syndrome, 588**
Matthew C. Exline, Eduardo Mireles-Cabodevila, and R. Duncan Hite

