

Contents

Dedications	ix
Contributors	xii
Foreword	xv
Preface to the first edition	xvii
Preface	xix
Acknowledgments	xxi

UNIT 1 Anatomical and physiological considerations

1. Wholeness of the individual 3
Timothy L. Kauffman and Osa Jackson Schulte
2. Skeletal muscle function in older people 9
Marilia Harumi Higuchi dos Santos, Walter R. Frontera and Lars Larsson
3. Effects of aging on bone 13
Emily L. Germain-Lee, Mary M. Checovich, Everett L. Smith and Katie Lundon
4. Effects of age on joints and ligaments 17
Louis R. Amundsen
5. Aging and the central nervous system 21
Darcy A. Umphred and Rolando T. Lazarus
6. Cardiac considerations in the older patient 31
Meryl Cohen
7. Pulmonary considerations in the older patient 37
Meryl Cohen
8. Effects of aging on the digestive system 43
Ronni Chernoff
9. Effects of aging on vascular function 47
Kristin von Nieda
10. Thermoregulation: considerations for aging people 53
John Sanko
11. The aging immune system 59
Gordon Dickinson

UNIT 10 Social and emotional issues	821
74. Cognitive impairment and communication 821 Diane M. Whisley	821
75. Legal considerations 487 Ron Scott	487
76. Physical therapy 505 Timothy L. Kauffman and Megan Laughlin	505
77. Medicare 505 Timothy L. Kauffman	505

UNIT 3 Neuromuscular and neurological disorders

12. Pharmacology considerations for the aging individual 63
Charles D. Ciccone
13. Laboratory assessment considerations for the aging individual 69
Christine Stabler
14. Imaging 73
Clive Perry

UNIT 2 Musculoskeletal disorders

15. Posture 99
Timothy L. Kauffman
16. Muscle weakness and therapeutic exercise 107
Timothy L. Kauffman and Michelle Bolton
17. Contractures 115
Wade S. Gamber and Reenie Euhardy
18. Postpolio syndrome 119
Marilyn E. Miller
19. Osteoporosis 121
Stephen Brunton, Blaine Carmichael, Deborah Gold, Barry Hull, Timothy L. Kauffman, Alexandra Papaioannou, Randolph Rasch, Hilmar H.G. Stracke and Eric Truumees
20. Rheumatic conditions 129
June E. Hanks and David Levine
21. The shoulder 135
Edmund M. Kosmahl
22. Total hip arthroplasty 141
Mark A. Brimer
23. Total knee arthroplasty 147
Mark A. Brimer
24. The aging bony thorax 151
Steven Pheasant and Jane K. Schroeder

25. Conditions of the geriatric cervical spine	159	Jeff A. Martin, Zoran Maric, Robert R. Karpman and Timothy L. Kauffman
26. Disorders of the geriatric thoracic and lumbosacral spine	163	Robert R. Karpman, Timothy L. Kauffman and Katie Lundon
27. Orthopaedic trauma	167	P. Christopher Metzger, Mark Lombardi and E. Frederick Barrick
UNIT 3 Neuromuscular and neurological disorders	173	
28. Neurological trauma	175	Dennis W. Klima
29. Rehabilitation after stroke	181	Maureen Romanow Pascal and Susan Barker
30. Senile dementia and cognitive impairment	185	Osa Jackson Schulte
31. Multiple sclerosis	191	Anita Alonte Roma
32. Parkinson's disease	199	Michael Moran
33. Tremor, chorea and other involuntary movement	205	Michelle M. Lusardi
34. Generalized peripheral neuropathy	213	Anita S.W. Craig and James K. Richardson
35. Localized peripheral neuropathies	219	James K. Richardson and Anita S.W. Craig
UNIT 4 Neoplasms	227	
36. Neoplasms of the brain	229	Stephen A. Gudas
37. Neoplasms of the breast	233	Stephen A. Gudas
38. Gastric and colon neoplasms	237	Stephen A. Gudas
39. Neoplasms of the skin	241	Stephen A. Gudas
40. Neoplasms of the prostate	245	Stephen A. Gudas
UNIT 5 Cardiopulmonary disease	249	
41. Exercise considerations for aging adults	251	Pamela Reynolds
42. Clinical development and progression of heart disease	259	Timothy L. Kauffman, Pamela Reynolds and Joanne Dalglish
43. Cardiac arrhythmias and conduction disturbances	265	Pamela Reynolds
44. Heart failure and valvular heart disease	275	Chris L. Wells
45. Cardiac pacemakers and defibrillators	281	Chris L. Wells
46. Invasive cardiac procedures	287	Chris L. Wells
47. Pulmonary diseases	297	Chris L. Wells
UNIT 6 Blood vessel changes, circulatory and skin disorders	305	
48. Diabetes	307	Emily L. Germain-Lee and Dominique Noë Long
49. Amputations	315	Joan E. Edelstein
50. Wound management	319	Richard Mowrer and Pamela G. Unger
51. The insensitive foot	333	Jennifer M. Bottomley
52. Skin disorders	345	Randy Berger and Barbara A. Gilchrest
UNIT 7 Aging and the pathological sensorium	355	
53. Functional vision changes in the normal and aging eye	357	Bruce P. Rosenthal and Michael Fischer
54. Functional changes in the aging ear	369	Stephen E. Mock
55. Considerations in elder patient communication	373	Carolyn Marshall
UNIT 8 Specific problems	379	
56. Dysphagia	381	Lisa Tews and Jodi Robinson
57. Incontinence of the bowel and bladder	387	Sandra J. Levi and Scott Paist
58. Iatrogenesis in older individuals	391	John O. Barr, Timothy L. Kauffman and LaDora V. Thompson
59. Hormone replacement therapy	399	Christine Stabler
60. Dizziness	403	Susan L. Whitney

61. Balance testing and training 409
Diane M. Wrisley
62. Fracture considerations 415
Timothy L. Kauffman, Carleen Lindsey and Rosanne Lewis
63. Stiffness 425
Mark V. Lombardi and Lynn Phillipi
64. Fatigue 431
Caroline O'Connell and Emma K. Stokes
65. The function of the aging hand 435
Eli Carmeli and Dario G. Liebermann
66. Overweight and obesity 439
Richard W. Bohannon
67. Evaluation of pain in older individuals 443
John O. Barr
- UNIT 9 Special physical therapeutic intervention techniques 447**
68. Conservative interventions for pain control 449
John O. Barr
69. Gait training 457
Patricia A. Hageman
70. Orthotics 465
David Patrick
71. Prosthetics 469
David Patrick
72. Complementary therapies for the aging patient 477
Carol M. Davis
73. Aquatic therapy 481
Beth E. Kauffman and Benjamin W. Kauffman

- UNIT 10 Social and government implications, ethics and dying 485**
74. Legal considerations 487
Ron Scott and Timothy L. Kauffman
75. Ethics 491
Mary Ann Wharton
76. Physical therapy and the generational conflict 501
Timothy L. Kauffman and Megan Laughlin
77. Medicare 505
Timothy L. Kauffman
78. The end of life 509
Timothy L. Kauffman
- UNIT 11 The rehabilitation team 513**
79. Caregivers: the sustaining force 515
Cheryl Anderson
80. Interdisciplinary geriatric assessment 519
Michael Moran, David C. Martin, Margaret Basiliadis and Timothy L. Kauffman
81. Gerontological and geriatric nursing 525
Brenda Hage
82. Geriatric occupational therapy 529
Molly Mika
83. Geriatric physical therapy 533
William H. Staples
84. Providing social services to the older client 537
James Siberski
- Index 541