

Contents



UNIVERSIDAD NACIONAL DE ENTRE RÍOS
FACULTAD DE INGENIERIA
CENTRO DE MEDIOS
BIBLIOTECA

№ 1 4 1 0

Contributors vii

Preface xi

1. Mechanics of Soft Tissues	<i>Y. C. Fung</i>	1.1
2. Properties of Bone	<i>S. C. Cowin, W. C. Van Buskirk, and R. B. Ashman</i>	2.1
3. Electromechanical Effects in Bone	<i>M. W. Johnson and J. L. Katz</i>	3.1
4. Biomechanical Properties of Articular Cartilage	<i>S. L-Y. Woo, V. C. Mow, and W. M. Lai</i>	4.1
5. Lubrication of Diarthrodial Joints	<i>V. C. Mow and A. F. Mak</i>	5.1
6. Properties of Tendons and Ligaments	<i>A. Viidik</i>	6.1
7. Muscle Mechanics	<i>T. A. McMahon</i>	7.1
8. Noninvasive Blood Pressure Recording and the Genesis of Korotkoff Sound	<i>G. M. Drzewiecki, J. Melbin, and A. Noordergraaf</i>	8.1
9. Thermal Properties of Tissues	<i>J. C. Chato</i>	9.1
10. Mechanics of the Uterus in Pregnancy and Labor	<i>J. Mizrahi and Z. Karni</i>	10.1
11. Skin Mechanics	<i>Y. Lanir</i>	11.1
12. Properties of Red Blood Cells	<i>R. M. Hochmuth</i>	12.1
13. Rheology of Leukocytes	<i>G. W. Schmid-Schönbein</i>	13.1
14. Rheology and Tube Flow of Blood	<i>G. R. Cokelet</i>	14.1
15. Mechanical Hemolysis	<i>P. L. Blankshear and G. L. Blankshear</i>	15.1
16. Static Elastic Properties of Blood Vessels	<i>T. R. Canfield and P. B. Dobrin</i>	16.1
17. Models of Arterial System	<i>J. C. Stettler, P. Niederer, and M. Anliker</i>	17.1

18. Mechanics of Blood Flow in the Microcirculation	<i>H. H. Lipowsky</i>	18.1
19. Interstitial Fluid Pressure and Lymph Flow	<i>A. R. Hargens</i>	19.1
20. Network Models of Peripheral Circulation	<i>A. S. Popel</i>	20.1
21. Fluid Mechanics in Atherosclerosis	<i>R. M. Nerem and M. J. Levesque</i>	21.1
22. Arterial Wall Oxygen Transport and its Relationship to Atherogenesis	<i>T. K. Goldstick and P. B. Dobrin</i>	22.1
23. Flow Through Collapsible Tubes	<i>R. D. Kamm</i>	23.1
24. Elasticity of the Lung	<i>D. L. Vawter and J. D. Humphrey</i>	24.1
25. Respiratory Control and Mechanics	<i>G. S. Longobardo, N. S. Cherniack, K. P. Strohl, and J. M. Fouke</i>	25.1
26. Respiratory Gas Exchange	<i>P. D. Wagner</i>	26.1
27. Artificial Lungs and Oxygenation Devices	<i>P. D. Richardson</i>	27.1
28. Neural Conduction	<i>D. Landowne</i>	28.1
29. Sensory Receptors	<i>D. C. Mountain</i>	29.1
30. Cochlear Mechanics	<i>C. R. Steele</i>	30.1
31. Vestibular Mechanics	<i>W. C. Van Buskirk and J. W. Grant</i>	31.1
32. Computed Tomography and 3-D Imaging	<i>L. D. Harris, E. L. Ritman, and R. A. Robb</i>	32.1
33. Blood Pressure and Flow Measurements	<i>M. Intaglietta</i>	33.1
34. Electrical Safety in Medicine	<i>A. Wald</i>	34.1
35. Stereology	<i>O. Mathieu-Costello</i>	35.1
36. Instrumentation for Pulmonary Function Tests	<i>R. L. Pimmel</i>	36.1
37. Theory and Design of Implantable Cardiac Pacemakers	<i>W. Greatbatch and W. M. Chardack</i>	37.1
38. Circulatory Assist Devices	<i>H. M. Spotnitz</i>	38.1
39. The Artificial Kidney	<i>A. Zelman</i>	39.1
40. Bioengineering of Total Joint Replacement	<i>J. L. Lewis and W. D. Lew</i>	40.1
41. Biomechanics of the Human Spine and Trunk	<i>A. B. Schultz</i>	41.1
Index Follows Chapter 41		