

## BOOK REVIEWS

by

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and

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### **A Primer on Amputations and Artificial Limbs.**

George Murdoch and A. Bennett Wilson, Jr., Springfield, IL: Charles C. Thomas, Publisher, Ltd.; 1998. 295 pp.

The authors provide an excellent overview and summary of the traditional knowledge and literature on amputation surgery and prosthetics. The book is well organized, readable, and the illustrations and schematic drawings are very helpful.

Healthcare providers, including medical students, residents, treating physicians, and physical and occupational therapists, who assist in the care of people with amputation will find this text useful. Because the book is meant as a primer, it is not fully comprehensive. The level of detail that would be most useful to a practicing prosthetist or active amputation surgeon is not included. However, the section on amputation surgery does give the type of overview that prosthetists and other providers need to understand.

I had hoped for a more detailed bibliography, but unfortunately found that many references were not provided. For more detail, further reading, or a more complete list of references, the reader is often referred to the comprehensive *Atlas of Limb Prosthetics* (edited by John H. Bowker and John W. Michael and published by Mosby, 1992).

The chapters introducing prosthetics and discussing lower limb prosthetics are indeed particularly helpful. These chapters provide a very nice review of the history and evolution of prosthetic styles, and nomenclature. By including this history, the current state of the art in sockets, suspension systems, components, and alignment is much easier to understand. Overall, this text does provide an excellent foundation in amputation and

prosthetic topics, and is a very good introduction to the more comprehensive texts.

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### **Assessing Medical Rehabilitation Practices: The Promise of Outcomes Research.** Marcus Fuhrer, MD, Baltimore: Paul H. Brookes Publishing Co.; 1997. 469 pp.

There are few textbooks that define an emerging field as clearly as does *Assessing Medical Rehabilitation Practices: The Promise of Outcomes Research*. Rehabilitation-related health services research has a long history, but few source books that bring together, in one volume, a state-of-the-art overview of conceptual, methodological, and content issues. One of the last such resources was Marcus Fuhrer's 1987 textbook, *Rehabilitation Outcomes: Analysis and Measurement* (Brookes Publishing Company). Comparison of these two texts illustrates how far medical rehabilitation has come in the past decade. The earlier textbook, with its focus on measurement, provides an excellent foundation on which to describe current issues and anticipate future trends.

The text results from an invitational conference, "An Agenda for Medical Rehabilitation Outcomes Research," held in August 1994, shortly after the research plan for the National Center for Medical Rehabilitation Research (a National Institutes of Health unit) was published. The purpose of the conference, and hence the text, is to promote the astute application of principles and techniques in rehabilitation-related health services research and to develop research recommendations related to evaluating the effectiveness of rehabilitation

practices. The authors were selected on the basis of their contributions to medical rehabilitation services research; their presentations comprise 18 of the 19 chapters. The authors comprise a "Who's Who" of health services research and policy study talent in medical rehabilitation. The topics covered include theoretical issues in treatment research, methodological challenges in conducting outcome studies, value perspectives in rehabilitation, models of disablement, measurement of disability-related concepts, socioeconomic approaches to an examination of outcomes, means of developing program monitoring systems, and ways to characterize rehabilitation interventions. Separate chapters address conditions affecting the central nervous system, the musculoskeletal system, and the cardiovascular system, as well as early development-related and aging-related conditions. The last chapter, written by the editor, serves to highlight issues raised or presented tangentially by other contributors. This chapter highlights the domains in which medical rehabilitation outcomes are a concern, describes the value-laden perspectives from which outcomes research can be viewed, distinguishes science- and management-oriented purposes of research, and emphasizes the importance of fostering an evidence-based practice for medical rehabilitation.

As described by the editor, the chapters form an "intricate tapestry" about the promise of rehabilitation services research. At the risk of slighting the other important contributions to this textbook, one of the most valuable chapters addresses the role of treatment theory in medical rehabilitation. Robert Keith's chapter reviews the history of effectiveness research and treatment theory in rehabilitation, treatment paradigms and theory in rehabilitation, relevance of learning theory, and means of elaborating a treatment theory for rehabilitation. He notes that payer demands for greater cost-effectiveness are creating a natural experiment by which we might glean a better understanding of where, how, and by whom rehabilitation services might be delivered efficiently. A subsequent chapter by Deborah Wilkerson and Mark Johnston build on Keith's material by illustrating how clinical program monitoring databases can be used to infer treatment effects.

The individual contributions provide a comprehensive, scholarly, and practical textbook for researchers, practitioners, administrators, payers, and graduate students in rehabilitation-related fields. Like many edited works, there is some overlap of content across chapters and the organization of the material could be made

clearer with additional editing of the various contributions. Nonetheless, the editor and contributors are to be commended for bringing together in one source a state-of-the-art summary of pivotal issues that will serve to direct rehabilitation outcome studies for many years. This textbook deserves space in the libraries of all those interested in improving rehabilitation practices.

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### NEW BOOKS

- Amyotrophic Lateral Sclerosis. (Contemporary Neurology Series. Vol. 49).** Mitsumoto H, Chad DA, Pioro EP. Philadelphia: F.A. Davis; 1998. 480 pp., illustrated. \$140.
- Assistive Technology: An Interdisciplinary Approach.** Bain BK, Leger D, editors. New York: Churchill Livingstone; 1997. 352 pp., illustrated. \$44.95.
- Athletic Ability and the Anatomy of Motion. 2nd ed.** Wirhed R. St. Louis: Mosby; 1997. 171 pp., illustrated. \$14.95.
- Ballistic Trauma: Clinical Relevance in Peace and War.** Ryan JM, Rich NM, et al., editors. London: Arnold; 1997. (Distributed by Oxford UP, New York.) 290 pp., illustrated. \$149.50.
- The Basal Ganglia and New Surgical Approaches for Parkinson's Disease. (Advances in Neurology. Vol. 74).** Obeso JA, DeLong MR, et al. editors. Philadelphia: Lippencott-Raven; 1997. 286 pp., illustrated. \$125.
- Basic Orthopaedic Biomechanics. 2nd ed.** Mow VC, Hayes WC, editors. Philadelphia: Lippencott-Raven; 1997. 514 pp., illustrated. \$89.
- Cerebrovascular Disease.** Batjer HH, Caplan LR, et al. editors. Philadelphia: Lippencott-Raven; 1997. 1276 pp., illustrated. \$275.

- Clinical Anatomy of the Visual System.** Remington LA, McGill EC. Boston: Butterworth-Heinemann; 1998. 258 pp., illustrated. \$65.
- Clinical Autonomic Disorders: Evaluation and Management. 2nd ed.** Low PA, editor. Philadelphia: Lippencott-Raven; 1997. 845 pp., illustrated. \$179.
- Clinician's Guide to Alarangeal Speech Therapy.** Graham MS. Boston: Butterworth-Heinemann; 1997. 395 pp. \$45.
- Cumulative Trauma Disorders.** Cassvan A, Weiss LD, Weiss JM, Rook JL, Mullens SU. Boston: Butterworth-Heinemann; 1997. 251 pp., illustrated. \$65.
- Functional Movement Reeducation: A Contemporary Model for Stroke Rehabilitation.** Ryerson S, Levit K, editors. New York: Churchill Livingstone; 1997. 488 pp., illustrated. \$90.
- Gait Disorders of Aging, Falls and Therapeutic Strategies.** Masdeu JC, Sudarsky L, Wolfson L, editors. Philadelphia: Lippencott-Raven; 1997. 443 pp. \$79.50.
- Growth Factors and Wound Healing: Basic Science and Potential Clinical Applications.** Ziegler TR, Peirce GF, Herndon DN, editors. New York: Springer-Verlag; 1997. 365 pp., illustrated. \$135.
- Hand Splinting: Principles of Design and Fabrication.** Wilton JC. Philadelphia: W.B. Saunders; 1997. 227 pp. \$49.95.
- Low Back Pain: A Scientific and Clinical Overview.** Weinstein JN, Gordon SL, editors. Rosemont, IL: The American Academy of Orthopaedic Surgeons; 1996. 766 pp., illustrated. \$85 (members), \$105 (nonmembers).
- Magnetic Resonance in Multiple Sclerosis.** Miller DH, Kesselring J, McDonald I, et al. New York: Cambridge University Press; 1997. 200 pp., illustrated. \$85.
- Manual of Cooperative Group Treatment for Aphasia.** Avent JR. Boston: Butterworth-Heinemann; 1997. 173 pp. \$30.
- Maximizing Brain Injury Recovery: Integrating Critical Care and Early Rehabilitation.** Mackay LE, Chapman PE, Morgan AS. Gaithersburg, MD: Aspen Publishers; 1997. 621 pp., illustrated. \$79.
- Modern Neuromuscular Techniques** Chaitow L, DeLany JW. New York: Churchill Livingstone; 1997. 177 pp., illustrated. \$42.
- Movement, Stability, and Low Back Pain: The Essential Role of the Pelvis.** Vleeming A, Mooney V, et al. editors. New York: Churchill Livingstone; 1997. 612 pp., illustrated. \$110.
- Muscle Energy Techniques.** Chaitow L, Libenson C. New York: Churchill Livingstone; 1997. 160 pp., illustrated. \$41.
- Orthotics in Functional Rehabilitation of the Lower Limb.** Nawoczenski DA, Epler ME, editors. Philadelphia: W.B. Saunders; 1996.
- Oxford Dictionary of Biochemistry and Molecular Biology.** Smith AD, Datta SP, et al., editors. New York: Oxford University Press; 1997. 740 pp. \$60.
- Physical Theory in Biology: Foundations and Explorations.** Lumsden CJ, Brandts WA, Trainor LEH, editors. World Scientific; 1997. 486 pp. \$85; paper \$42.
- PM&R Secrets.** O'Young B, Stiens SA, editors. Philadelphia: Hanley & Belfus; St. Louis, MO: Mosby; 1997.
- Practical Manual of Physical Medicine and Rehabilitation: Diagnostics, Therapeutics, and Basic Problems.** Tan JE, Horn SE. St. Louis: Mosby; 1998. 830 pp., illustrated. \$36.95.

**Principles of Bone Biology.** Bilezikian JP, Raisz LG, Rodan GA, editors. San Diego, CA: Academic Press; 1996. 1398 pp., illustrated. \$149.95.

**Principles of Neurologic Rehabilitation.** Lazar RB, editor. New York: McGraw-Hill; 1998. 709 pp. illustrated. \$85.

**Vascular Surgery: A Comprehensive Review. 5th ed.** Moore WS, editor. Philadelphia: WB Saunders Co.; 1998. 903 pp., illustrated. \$195.

**Wear and Osteolysis in Total Joint Replacements.** Kadoya Y, Kobayashi A, Ohashi H. Oslo, Copenhagen, Stockholm, Boston: Scandanavian University Press (Acta Orthopaedica Scandinavica Supplementum No. 278, Vol. 69); 1998.