

introduction to medical radiation protection. Despite its brevity, it is remarkably comprehensive.

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Principles of Nuclear Medicine. H.N. Wagner, Jr., Zsolt Szabo, Julia Buchanan, eds., W.B. Saunders, Philadelphia, PA, 1995, Contact publisher for price information.

The editors of this text have successfully completed a monumental undertaking in coordinating the contributions of 175 authors in the many fields related to the practice of nuclear medicine. It will be of value for both physicians and basic scientists and also of interest to students of medical and scientific history. The extent of the work covered in the 51 chapters, some of which have been broken down into a total of 70 sections, can be gauged in part by the 7800 publications referenced in the bibliographies of the separate chapters and sections, ranging up to 1131 titles in the chapter on the heart, which includes 313 titles in the coronary artery disease section alone.

The references cover the background of nuclear medicine development through the early 1990s and are limited only by the delays in the preparation and review of manuscripts for publication. Organ systems and disease-specific chapters and sections comprise approximately one-half of the text, the remainder being devoted to relevant scientific, technical and biological material.

Detailed evaluation for the scope of the text was done by this reviewer for only a limited sample of the numerous chapters and sections. Of particular current interest are the sections dealing with neurology, cardiology, oncology, nephrology and infectious diseases. Future trends in these different clinical areas are discussed. We are introduced to new concepts, such as molecular nuclear medicine, molecular messengers and genetic modeling in human disease.

This volume is highly recommended as an excellent textbook and in-depth resource on all aspects of the practice and science of nuclear medicine. The only caveat that may be offered to those acquiring this book is to be equipped with a comfortable chair, a sturdy desk, good lighting and possibly a magnifying glass with which to survey the bibliographies.

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Nuclear Medicine: Diagnosis and Therapy. John C. Harbert, William C. Eckelman, Ronald D. Neumann, eds. Thieme Medical Publishers Inc., New York, New York, 1234 pages, 1996, \$195.

The study of medicine is a science; its practice, frequently, art. A clinical textbook of a medical science should serve to connect, if not bridge, these two sometimes incompatible attributes; it also should seek to become the standard reference work containing paradigms for direction and thought.

The art of clinical medical science, however, can be explained in different ways. One *genre* of textbook brings together the diversity of current clinical science and research; another attempts to lay down the science and the practice of the clinical specialty as established by a group of clinical researchers working in concert over a significant period of time.

This textbook of nuclear medicine has been put together in the latter mold by respected nuclear medicine researchers who have contributed significantly to the development of the specialty. Their familiarity with the field is evident in the steady progression of chapters from the basic sciences section through clinical sciences and finally therapy. Chapters are detailed without being esoteric; attention is paid to standard clinical practice and promising avenues in careful measure. References are exhaustive and as current as can be in a text. Not only are individual chapters enlightening, but the overall structure speaks of thoughtful editing. Indeed, within the chapters is an organization that allows varying depths of understanding without loss of the thread (of nuclear medicine) through the textbook.

The editors have embellished the book with outstanding chapters by a diverse selection of authors. Basic sciences ends with an in-depth look at radio-microbiology. The nuclear cardiology section is superb; Drs. McNeil and Rutter have elucidated, simply yet exhaustively, the principles of medical decision-making and its role in the development of optimized diagnostic algorithms. The importance of algorithms in nuclear medicine therapy is also underscored in the excellent chapter by Dr. Harbert, who presents the multiple facets of radioiodine therapy in differentiated thyroid carcinoma, without bemoaning the relative lack of firmly established therapeutic principles.

The careful (and timely) attention paid to nuclear medicine therapy is enhanced by inclusion of several Appendices, including radiocolloid properties and common beta dose rates. The absence, however, of a section on current thinking in quantitation of *tumor* dosimetry is puzzling.

The thoroughness with which the book has been put together is further reflected in well-illustrated plates. Many of these illustrations are additionally placed in context, in a gray scale image, a novel and helpful feature. Appropriate attention has also been devoted to nuclear medicine regulations and laboratory safety practices.

Decay schemes (though I was surprised to see ^{188}Re but not ^{186}Re), physical data tables (where ^{186}Re is tabulated), and nomograms in the Appendices are detailed without being burdensome; and welcome additions are iodine contents and diets (and, of course, the Memorial Sloan-Kettering Cancer Center dosimetry protocol for thyroid cancer).

If the book may be faulted for anything, it may be for offering too much. Appendices detailing conversion units, a universal decay table for $^{99\text{m}}\text{Tc}$, "common abbreviations," are perhaps excessive. Eckelman's chapter is perhaps too detailed for the average nuclear medicine physician; for an interested researcher, however, it is priceless.

Several nuclear medicine textbooks have recently been published, and, in these cost-conscious times, it may not be feasible for one to possess all. However, this text is probably most important for the nuclear medicine practitioner with an interest in therapy, and it must proudly stand on every department library shelf, for its elucidation of standard protocols as well as for its reference lists.

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