

are curious about numerical methods but are left unenlightened by theorems and proofs.

RICHARD E. WENDT, III
*Baylor College of Medicine
Houston, Texas*

NUCLEAR MEDICINE IN CLINICAL ONCOLOGY. Current Status and Future Aspects.
C. Winkler, Ed. Berlin, Springer-Verlag, 1986, 420 pp, \$90.00

This book is a collection of 61 papers presented in the Tumor Symposium of the Society of Nuclear Medicine Europe held in May 1985 in Bonn, Federal Republic of Germany. As Dr. Winkler states in the preface, it is not always easy to correctly assess the practical significance of the respective procedure with regard to application on a broad scale. Oncology has emphasized the strength of nuclear medicine in tissue characterization since nuclear medicine has the sensitivity to identify physiologic change before structural change. Oncologists should be informed on the often highly specialized or new methods in order to integrate these methods into their treatment planning in the best manner possible. This book contains contributions of international experts exchanging views on the current importance of nuclear medicine in clinical oncology.

This book is grouped into nine sections:

1. Introduction and Basic Considerations.
2. Technical Principles.
3. Diagnostic Use of Radiopharmaceuticals.
4. Radioimmunodetection.
5. Nuclear Magnetic Resonance Imaging and In Vivo Spectroscopy.
6. Positron Emission Tomography.
7. Use of Tumor Markers in Vitro.
8. Therapeutic Use of Radiopharmaceuticals including Labeled Antibodies.
9. Experimental Approaches and Future Aspects.

The coverage attempts to be encyclopedic, but the depth of the discussion is uneven and generally limited in scope with preliminary research reports that are inevitable in a symposium with multiple authors. However, the sections on introduction, radioimmunodetection and therapeutic use of radiopharmaceuticals are very informative and orient the reader to current developments in radioimmunologic diagnosis and therapy. The sections on NMR imaging and spectroscopy are also informative with general overviews. This book suffers from a lack of good illustrations and from poor editing by some contributors. The reference sections vary from excellent to poor.

Nevertheless, I find this book to be useful in considering the clinical application of up-to-date nuclear medicine procedures for the diagnosis and therapy of cancer. This book is recommended primarily for nuclear physicians but it will be also of value to clinical oncologists. Radiology residents or practicing radiologists may not find it a good value in view of the price, since it mostly deals with investigational studies. Unusually

high price seems to limit its usefulness.

E. EDMUND KIM
*University of Texas
Medical School
Houston, Texas*

SPECT SINGLE-PHOTON EMISSION COMPUTED TOMOGRAPHY: A PRIMER.

R.J. English, S.E. Brown. New York, The Society of Nuclear Medicine, 1986, 148 pp, \$17.00

The authors' principle objective in writing this book was "to assist nuclear medicine technologists in expanding their knowledge of nuclear medicine to include SPECT". The objective is approached in this short text in a series of six chapters, an 11 page appendix and a six page glossary. The book begins with an introductory chapter which gives a brief history of SPECT; this is followed by a chapter that presents a description of the basic fundamentals of various image reconstruction methods. Backprojection, filtered backprojection, two-dimensional Fourier and iterative reconstruction and correction methods for photon attenuation are each addressed. Quality control requirements, acquisition parameters, image processing techniques and clinical applications of SPECT are presented in the four remaining chapters. Adequately illustrated and presented with a minimum of mathematics, with the exception of an eight page appendix that provides a mathematic description of backprojection, filtered backprojection, two-dimensional Fourier transformation and attenuation correction, the book provides a very good introduction to the basics of SPECT. It introduces the reader to the acquisition, processing, display and quality control techniques encountered in SPECT procedures and it provides the reader with a guide to basic SPECT terminology. Although the text would have benefited from better editing of some of the definitions listed in the glossary and improved wording of some of the study questions at the end of chapters, this was felt to be a minor criticism in respect to the overall good quality of the remainder of the text.

This primer on SPECT meets the authors goals of bringing together material to "answer the technologist's fundamental questions" on SPECT and, at the same time, it provides a good introductory text on the technology underlying rotating camera SPECT for the nuclear medicine resident or nuclear medicine clinician.

DAVID A. WEBER
*University of Rochester School of Medicine and Dentistry
Rochester, New York*

Books Received

Physics in Nuclear Medicine, Second Edition. *J.A. Sorenson, M.E. Phelps. Orlando, Grune & Stratton, Inc., 1986, 590 pp, \$47.50*