

controversial, the radiopharmaceuticals listed are not current with the state of practice. Likewise, a description of the rectilinear scanner appears to be outmoded. The advantage of "shorter-lived radiopharmaceuticals" relative to imaging of pediatric patients is mentioned on pp 6 and 7, but there has been little further development to justify the repeated statements. Tables in Appendix A present S factors by organs and age groups for most of the commonly used radionuclides.

In the ultrasound section, there are concise, yet excellent reviews of the interaction of ultrasound with matter and biological effects. Although little information exists about low-level risk, the admonition that "repeated ultrasonic exposures may eventually produce sufficient accumulated damage to cause clinically apparent injury" should be born in mind. This is especially true in view of the inadequacy of data on efficacy and safety of the ultrasound study in pregnancy, reviewed recently in an editorial (*Lancet* ii: 201-202, 1984). Tables providing detailed specifications of various ultrasound equipment are of dubious benefit to most readers.

The two diagnostic modalities are treated independently and there is no strategic discussion to deal with diagnostic efficacies in this era of abundant diagnostic imaging modalities. Where will this report find greater application? It will be where questions such as benefit-risk considerations, outcomes of misadministration, and/or needs for general dosimetric information arise. It will be useful in the nuclear medicine laboratory, though not necessarily in the individual library.

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BIOLOGICAL EFFECTS OF ULTRASOUND: MECHANISMS AND CLINICAL IMPLICATIONS.

National Council on Radiation Protection and Measurements,
Bethesda, NCRP Publications, 1983, 266 pp, \$15.00

This inexpensive book was prepared by the National Council on Radiation Protection and Measurements Scientific Committee on biological effects of ultrasound. It offers extensive coverage of the basic physics of ultrasound as well as its possible bioeffects that are encountered in vitro are covered as well as those that occur in vivo in animals and humans. Because of its price and comprehensive coverage of the topic, this book is recommended as a reference to radiologists and obstetricians who perform diagnostic sonography. The section which covers data on exposure to obstetrical patients is particularly helpful.

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TECHNOLOGICAL BASIS OF RADIATION THERAPY: PRACTICAL CLINICAL APPLICATIONS.

S. H. Levitt, N. duV. Tapley, Eds. Philadelphia, Lea & Febiger, 1984, 336 pp, \$45.00

Drs. Levitt and Tapley were encouraged by Dr. Gilbert Fletcher to write this book on the *Technological Basis of Radiation Therapy* as a companion text to his *Textbook on Radiotherapy*. It admirably fulfills that function. The contributing authors include 25 outstanding physicists and radiation oncologists.

This well-planned volume contains much information on the rational of therapy, an abundance of excellent photographs and diagrams, and exquisitely detailed descriptions of techniques of treatment planning and execution.

This book is an excellent reference and text for radiation oncologists, residents-in-training, physicists, and technologists. The users are wisely cautioned by the authors to evaluate the techniques described in relation to their own experience and equipment.

It can safely be predicted that this volume will soon be on the shelves or most radiation oncology libraries. The contributing authors would do the profession a significant service by "updating" the information at intervals as technological advances occur.

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Books Received

Coordinated Diagnostic Imaging. J. F. Simeone, Ed., New York, Churchill Livingstone, Inc., 1984, 345 pp, \$39.50

Differential Diagnosis in Nuclear Medicine. E. B. Silberstein, J. G. McAfee. New York, McGraw-Hill Book Company, 1984, 318 pp, \$35.00

Magnetic Resonance Annual 1985. H. Y. Kressel, Ed., New York, Raven Press, 1984, 324 pp, \$49.50

New Concepts in Cardiac Imaging 1985. G. M. Pohost, C. B. Higgins, J. Morganroth, J. L. Ritchie, H. R. Schelbert. Boston, G. K. Hall & Co., 1984, 310 pp, \$49.95

Nuclear Magnetic Resonance and Its Clinical Applications. R. E. Steiner, G. K. Radda, Eds. New York, Churchill Livingstone, 1984, 206 pp, \$22.00

Radionuclide Scintigraphy in Orthopaedics. C. S. B. Galasko, D. A. Weber, Eds. New York, Churchill Livingstone, 1984, 266 pp, \$55.00