# **NMT Bookshelf**

#### PRACTICAL NUCLEAR MEDICINE

F.S. Ashkar, ed, New York, Medcom Press, 1974, 217 pp, \$25.00.

In his preface, William H. Beierwaltes congratulates the editor for fulfilling two purposes "admirably": "It makes available for the first time a selfinstruction summary and defines a core of knowledge that should be mastered by anyone interested in Nuclear Medicine." He goes on to say that everything contained in this book is "up-to-date."

The subjects covered by the editor and 15 contributors are "Instrumentation for Imaging Procedures"; "Radiopharmaceuticals for Clinical Use"; "Data and the Computer"; "The Central Nervous System"; "The Thyroid, Parathyroid and Adrenals"; "The Respiratory System"; "The Gastrointestinal System"; "The Cardiovascular System"; "The Skeletal System"; "The Cardiovascular System"; "The Renal System"; "The Reproductive System"; "The Renal System"; "The Hematopoietic System"; "Tumor Localization"; "Detection of Human Tumor-Associated Antigens"; "Radioimmunoassay"; and "Radioisotope Therapy." A glossary and Appendix as well as a self-evaluation section round out the text.

One of the best chapters is 16: "Radioisotope Therapy." The presentation is straightforward. Lacking are the long dissertations concerning other than normal, routine therapy modalities. Everything written is precise, concise, and accurate.

The overall quality is quite good. There are many fine illustrations, tables, and figures. Some suffer from overexposure and/or too high contrast.

The text is easily comprehensible, and the selfevaluation examination of some 200 multiple choice questions is included for the reader's convenience.

> ROBERT J. LADUE University of Iowa Hospitals and Clinics Iowa City, Iowa

#### NUCLEAR MEDICINE

Henry N. Wagner, Jr., ed, New York, HP Publishing Co., 1975, 272 pp, \$18.95.

Although primarily intended for physicians, this well written, authoritative book should be a valuable reference source for the practicing nuclear medicine technologist, and may also be useful to students of nuclear medicine technology. The text is divided into four sections: history, technology, diagnosis and therapy, and radioassay. Within these four sections are 24 chapters written by 21 experts.

This material originally was published as a series of papers in *Hospital Practice* from April 1968, through July 1974, although the bulk appeared after October 1971. Some of the chapters have undergone minor revisions and updating; for example, the chapter on skeletal imaging now includes a discussion of the newer <sup>99m</sup>Tc-phosphorus complexes, and the material on the thyroid has been revised to include an expanded section on testing with the thyrotropin releasing hormone (TRH), as well as an additional table concerning clinical states associated with alterations in T<sub>3</sub> and T<sub>4</sub> serum concentrations.

Of particular interest to the nuclear medicine technologist are the sections dealing with technology and radioassay. Here the reader will be introduced to many important topics such as cyclotron-produced radionuclides, semiconductor detectors, positron cameras, tomographic imaging devices, computers, and the principles of radioimmunoassay and competitive protein binding. It must also be mentioned that many of the chapters in the diagnosis and therapy section also contain important technical information.

Following the usual style of *Hospital Practice*, the articles are written in a clear, concise form so as to be easily understood by the general reader. The text abounds with drawings, tables, charts, and photographs, most of which are in color. These are generally superb; in fact, many of the color illustrations may only be characterized as spectacular.

A list of selected references appears for each chapter. These could serve as a basis for further reading on a particular topic.

HERBERT D. STRAUSS VA Hospital East Orange, N.J. 07019

## RADIONUCLIDE SCANNING IN CYANOTIC HEART DISEASE

G.F. Gates, Springfield, III, Charles C. Thomas, 1974, 100 pp, \$15.00.

Heretofore, invasive procedures were necessary to properly diagnose intracardiac shunts. However, the advent of scintillation cameras, computers, and even some less sophisticated equipment offers the cardiologist and patient a very simple, noninvasive method for achieving the same diagnosis. Not only that, but the procedure can be repeated following surgical repair of the shunt without disturbing the patient.

In this book, Dr. Gates has done an excellent presentation of his case, methods, and results. Any technologist and physician should be able to employ this technique of scanning to obtain satisfactory cardiac studies. A very detailed explanation is given in easy to read text.

The book is filled with excellent illustrations and tables. Table 1, as an example, is the "Protocol for Technetium-99m-Labeled Albumin." This is a very complete, recipe-cookbook procedure for preparing <sup>99m</sup> Tc-human serum albumin.

I commend the author for his fine presentation and strongly recommend the text to those who wish to become involved in noninvasive radionuclide scanning procedures.

> ROBERT J. LADUE University of Iowa Hospitals and Clinics Iowa City, Iowa

#### NUCLEAR MEDICINE TECHNOLOGY EXAMINATION REVIEW BOOK

G.D. Frey and C.J. Klobukowski, Flushing, NY, Medical Examination Publishing Co, 1974, 183 pp, \$10.00.

This book, another in a long series of medical and paramedical examination review books, is intended to aid the nuclear medicine technology student in studying for a registry examination. The 21 sections of this volume deal with almost every aspect of nuclear medicine technology. There is a total of 1322 multiple choice and true or false questions, and each question is referenced to a specific textbook and the page number from which the reference is taken. An answer key is also provided so that the examinee can check the correct answer.

Most of the examination questions are well written and quite specific, and also present some of the tricks usually employed in registry examinations, including the use of such words as "only," "not," and "all of the above except." A very few questions are poorly written and have quite incorrect references. Such is the case with question 1301:

I-131 therapy for thyroid disease is used to treat:

- A. Hyperthyroidism
- B. Hypothyroidism
- C. Only malignant conditions
- D. A and B only
  - Ref. 1,—page 711.

It is quite obvious that B and D are incorrect. Also, C is incorrect if you read "*only* malignant conditions." Thus, A is the only correct choice. A better written question might tend not to confuse the examinee. Further confusion is created by the reference:

Blahd, W.D. Nuclear Medicine 2nd Edition, McGraw Hill Book Company, New York, 1971.

Page 711 is the opening page of Chapter 26: "Treatment of Hyperthyroidism with Radioactive Iodine." Other than the title of the chapter, no reference is made that could support the question; this is both misleading and confusing.

While I am not opposed to these examination review books, I am aware of some of the criticisms directed toward them. The previous three volumes for ray technology students seem to be similar in quality to this one. As a self-examination, they are useful. They start students thinking in the terms of registry questions, dealing with format, wording, and tricks. Any self-help a student can get prior to a registry examination is helpful. However, if these books are to be continued, care in choosing questions should be the authors primary goal. We would not wish to glean from the registry examinations questions in their format and wording, rather questions that aid and teach students.

> ROBERT J. LADUE University of Iowa Hospitals and Clinics Iowa City, Iowa

# HANDBOOK OF BIOMEDICAL INSTRUMENTATION AND MEASUREMENT Harry E. Thomas, Reston, Va, Reston Publishing Co, 1974, 550 pp, \$9.95.

This handbook contains 13 chapters describing medical specialty equipment, from cardiology instrumentation to ultrasound machines. The emphasis is on "Cardiac emergency, intensive care, and support equipment, particularly electrocardiography." Therein, I believe, lies its value to nuclear medicine technology. With a strong emphasis on cardiac imaging at the present time, the information available in this text becomes very valuable.

There are separate sections for radiographic and nuclear medicine instrumentation. In each, the basic scientific principles of the art are discussed prior to a discussion of the equipment and its functions. Chapter 12, "Isotopes and Nuclear Medicine," is broken down thusly: "Atomic Structure"; "Ionization, Nomenclature"; "Radioactivity"; and "Medical Applications." The illustrations are exceptionally good and the text of this chapter is very well written. I noted only one not too obvious error with regards to position marking and legend in an illustration of an image of a brain scan.

I have thoroughly enjoyed reading this volume and recommend it as an excellent addition to any nuclear medicine technologist's library.

> ROBERT J. LADUE University of Iowa Hospitals and Clinics Iowa City, Iowa

### **BOOKS TO BE REVIEWED IN MARCH**

**Textbook of Nuclear Medicine Technology, 2nd edition,** Paul J. Early, Muhammad Abdel Razzah, and D. Bruce Sodee, C. V. Mosby Co, St. Louis, Mo, 1975, 496 pp, 412 illustrations, \$18.95.

Technology and Interpretation of Nuclear Medicine Procedures, 2nd edition, D. Bruce Sodee, Paul J. Early, and Ashwin Patel, C. V. Mosby Company, St. Louis, Missouri, 1975, 564 pp, 822 illustrations in 187 figs, \$26.95.