

CLINICAL SCINTILLATION IMAGING, 2nd ed. L. M. Freeman and P. M. Johnson, eds. New York, Grune and Stratton, 1975, 820 pp, \$55.00.

This text, devoted entirely to the imaging aspects of nuclear medicine, is the second edition of a previously well-accepted text. The list of authors reads like a *Who's Who in Nuclear Medicine*. Each chapter is entirely capable of standing alone as a complete monograph on the given topic. In general, the chapters are strong on both technical and diagnostic criteria. One of the fine points of the text is the intercomparison with other appropriate imaging techniques. This comparison should give the uninitiated reader a feeling for the comparative merit of nuclear medicine examinations.

The basic science material, presented traditionally in the first few chapters of this text, is of generally high quality and is sufficiently readable that both the novice and the nuclear medicine physician desiring some review can easily obtain the needed information. Also, the text contains two unusual features, both of which are excellent. The first is a chapter by Benedict Cassen which tells those of us who are not old enough to remember the origins of nuclear medicine where we came from and how we got to where we are now. This chapter should probably be required reading for every practicing physician in nuclear medicine as well as for most basic scientists. The other item, which is particularly helpful again to novices, is the glossary of terms at the end of the book. Nothing is more frustrating to the new entrant into nuclear medicine than not to understand the language spoken. Here he can quickly find what he needs to know.

The only constructive criticism that can be made is that the book does not deal sufficiently with the emerging computer technology and its applications to nuclear medicine. One would hope that for future editions the editors will consider an introductory chapter on computers under the instrumentation section and more extensive discussions of computer applications under the individual chapters.

Clinical Scintillation Imaging will make a valuable addition to any nuclear medicine library whether the practitioner be a full-time, part-time, or student nuclear medicine physician.

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BASIC NUCLEAR MEDICINE. Sheldon Baum and Roland Bramlet. New York, Appleton-Century-Croft, 1975, 270 pp, \$13.75.

With the continued proliferation of texts on a variety of subjects in nuclear medicine, the authors should be commended for preparing a comprehensive synopsis of nuclear medicine for physicians who have only a limited knowledge of the field. To accomplish this objective, the book is divided into three sections: clinical scanning and external detector studies; in vitro laboratory techniques; and basic nuclear science, instrumentation, and radiation safety.

Compared to an earlier text of comparable size and composition, C. D. Maynard's *Clinical Nuclear Medicine* (Lea and Febiger, 1969), the contents of *Basic Nuclear Medicine* vary in the depth of presentation and are less relevant at times to the practice of nuclear medicine today. A prime example is encountered in Chapter 1 where, after a superb description of the technique and clinical utility of static brain imaging, no mention is made of the cerebral perfusion study. Only at the end of Chapter 6 is a description of the procedure offered. The relevancy of the book is to be questioned when, after an in-depth dissertation on the method and application of the BEI, conversion ratio, and $PB^{131}I$ in thyroid evaluation, the authors fail to even mention the more practical techniques employed today, such as radioimmunoassay of serum T_4 , T_3 , and TSH. Similarly, time-activity curves generated from scintillation-camera renal images after the injection of ^{131}I -orthohippurate have long replaced the ancient method of dual-detector renogram curves, and yet the former were not presented as a present-day technique.

In the second section the descriptions of the more standard in vitro procedures are methodologic in their presentation and offer no clinical utilizations or results. Unfortunately, the brief discussion of radioassays does not differentiate the types (e.g., radioimmunoassay, competitive protein binding) or provide pertinent clinical applications. On the other hand, the basic nuclear medicine section is well composed, with succinct descriptions, vivid examples, and only minor omissions. The appendix has little usefulness except for its designations of critical organs and the absorbed radiation dose values.

Unquestionably, *Basic Nuclear Medicine* will stimulate some interest. However, I doubt that it will give significant impetus to the understanding or wider recognition of nuclear medicine. Predictably, the book should appeal to students of nuclear medicine and technologists, but its longevity is dubious.

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DIAGNOSTIC ULTRASOUND IN NEUROLOGY. METHODS AND TECHNIQUES. M. S. Tenner and G. M. Wodarska. New York, Wiley, 1975, 183 pp, \$28.00.

Readers will recall that the simplest method of displaying ultrasound reflections is the A-mode tracing whereby the acoustic interfaces encountered by a single ultrasonic beam are displayed as deflections of varying amplitude on an oscilloscope. B-mode ultrasound refers to the process whereby each of these deflections is reduced to a dot which ideally varies in brightness with the strength of the acoustic interface. In the TM-mode used for echocardiography, this single ultrasonic beam, displayed with dots at each acoustic interface, is placed on a varying time base to record the movement of individual echoes. B-mode ultrasound is also the source of two-dimensional ultrasound, otherwise known as B-scan ultrasound, where an infinite series of ultrasonic beams are built up into a