

will find the chapters on equipment purchase and facilities planning useful; and those interested in bureaucracy will find the chapters on government agencies and regulation of radioactive drugs complex. The text is limited by a lack of unity and organization that usually results in a symposium being reproduced as a book. The volume should be available in university and larger department libraries.

RONALD G. EVENS, M.D.
Mallinckrodt Institute of Radiology
St. Louis, Missouri

INTRODUCTORY PHYSICS OF NUCLEAR MEDICINE. R. Chandra. New York, Lea and Febiger, 1976. 186 pp, \$12.00.

This text is primarily addressed to nuclear medicine residents and nuclear medicine technologists. As stated in the preface, the elementary concepts of general physics are assumed, and this book is intended to provide only the minimum physics basic to nuclear medicine. It should be understood that the material presented in this text is an introduction only and not for use as a reference source.

The initial chapters cover a basic review of the atom and radioactive processes followed by the production of radio-nuclides and radiopharmaceuticals. The interactions of radiation with matter are covered in some detail, and this section includes dosimetry and detection of radiation, both in vitro and in vivo. A chapter on nuclear medicine equipment is included with a discussion of contrast, resolution, and sensitivity of these instruments. Last, some of the biologic effects of radiation are covered, along with therapeutic uses and safe handling of radioactive sources.

The material is presented in a simple manner, but in some areas this simplicity can be somewhat misleading. The author does provide references at the end of the text so that the interested reader may find more information on a given topic. The illustrations are adequate, though many are amateurish.

This book fills a long standing need for a basic introduction to the physics necessary for the understanding of nuclear medicine.

RODNEY WILLIAMS, M.A.
Bowman-Gray School of Medicine
Winston-Salem, North Carolina

METABOLIC DISORDERS OF BONE. C. R. Paterson. Dundee, Scotland, Blackwell Scientific Publications, 1974, 373 pp. \$33.00.

This work is a text book, a reference book, and a readable book. Alone, this unusual combination of features commends the book. In 284 pages Dr. Paterson gives a lucid and well-illustrated account of metabolic disorders of bone. About 1500 references are cited and appropriate review articles are highlighted in the text. The reader finds himself stimulated to probe the cardinal papers for himself.

It is perhaps not surprising that many references and a fair number of the figures are taken from Fourman and Royer's classic book. In several ways this book resembles Fourman's but is easier to read. The many references are woven into the text in such a way that the sentences do not seem disjointed; and in a review of those references you discover that the parathyroid glands were first described in the Indian Rhinoceros, that nineteenth century animals in London Zoo had rickets, and that normal urine will delay the setting of cement.

This is essentially a practical book. It gives the distinct impression that the author's experience has caused him to form certain strong opinions about his subject; thus, "The only feature typical of hyperparathyroidism is the fact that it is so frequently atypical" or "the patient in whom a diagnosis is made probably owes a greater debt to the clinician who first suspects a disorder of calcium metabolism than to the specialist who confirms it" or again "the larger the pile of films of negative intravenous and retrograde pyelograms a patient has, the lower is the probability that the symptoms are due to stones." While one may be piqued by these generalizations, one cannot but be refreshed by an author who jolts you from your own entrenched position.

A few printing errors are dotted through the text. A couple of statements on the autonomy of the parathyroid seem contradictory, and it is not strictly true to say that the x-ray image of the soft tissues of the hand can be eliminated by immersing the part in water. Notwithstanding these minor points, *Metabolic Disorders of Bone* is a book from which any one interested in the skeleton will benefit and derive pleasure.

E. S. GARNETT
McMaster University Medical Centre
Hamilton, Ontario

BOOKS RECEIVED

The receipt of the following books is acknowledged:

Atlas of the Human Brain and the Orbit for Computed Tomography. Joseph Hanaway, William R. Scott, and Charles M. Strother. 75 pp, illustrated. St. Louis, Warren H. Green, Inc., 1977. \$22.50.

Xeroradiography: Uncalcified Breast Masses. John N. Wolfe, 187 pp, illustrated. Springfield, Ill., Charles C. Thomas, 1977. \$28.00.

Diagnosis and Treatment of Incorporated Radionuclides. Proceedings of a Seminar, Vienna, Dec. 8-12, 1975. 625 pp, illustrated. Vienna, IAEA, 1976. \$39.00.

Directory of High-Energy Radiotherapy Centres, 1976 ed. 260 pp. Vienna, IAEA, 1976. \$15.00.

Modification of Radiosensitivity of Biological Systems. Proceedings of an Advisory Group Meeting, Vienna, Dec. 8-11, 1975. 216 pp. Vienna, IAEA, 1976. \$14.00.

Tumour Localization with Radioactive Agents. Proceedings of an Advisory Group Meeting, Vienna, 139 pp, illustrated. Vienna, IAEA. 1976. \$10.00.