RADIOPHARMACEUTICALS IN NUCLEAR MEDICINE PRACTICE.

R. J. Kowalsky, J. R. Perry, Norwalk, Connecticut, Appleton and Lange 1987, 516 pp, $95.00

This book is considered an information introductory text discussing the fundamental use and clinical application of radiopharmaceuticals in nuclear medicine. It is a welcome addition which is quite suitable for classroom use, as well as a handy personal reference. The book is well written and presented in a logical and conventional way. The quality of the paper, print and illustrations is excellent.

The book consists of 18 chapters. The first six chapters present the fundamentals such as an "overall" view of radiopharmaceuticals and their use in nuclear medicine, physics, chemistry as well as quality control of radiopharmaceuticals. Chapter 3 briefly discusses radionuclide generators with particular emphasis on the technetium-99m generator, while Chapter 5 contains useful information on nuclear pharmacy which includes pharmacy design, equipment and instrumentation required among other topics for an ideal safe radiopharmacy.

The next eight chapters discuss radiopharmaceutical use and their applications to major body systems. These systems are brain, cerebrospinal fluid, thyroid, heart, lung, liver, gallbladder, spleen and bone marrow, kidney and genitourinary systems, bone, and total-body imaging.

These chapters are well arranged as each chapter begins with a short introduction, followed by physiologic anatomy, a brief chronological development of radiopharmaceuticals used to study the organ system and the current agents of choice. Each chapter ends with a discussion of the clinical application of radiopharmaceuticals used in studying the particular organ system followed by a list of references to provide the reader with a more detailed literature of the topic discussed. These chapters include images, tables and graphs to illustrate normal and abnormal studies with interpretation of results.

Chapter 15 deals with the use of radiopharmaceuticals in nonimaging in vivo studies e.g., blood volume measurements, thyroid uptake and ferrokinetic studies among other tests. Chapter 16 discusses the basic principles used in in vitro studies performed by radioimmunoassays (RIA) with some few examples discussed. I believe this chapter should be expanded in future edition of the text. Chapter 17 is devoted to miscellaneous radiopharmaceuticals not discussed in other chapters, but are quite useful in nuclear medicine practice such as adrenal and thyroid glands imaging agents and detection of deep veinous thrombosis. Finally Chapter 18 deals with licensing, regulatory control and radiation safety aspects.

The level of this text is considered introductory to intermediate in the field. I highly recommend it to radiology and nuclear medicine residents, fellows, technologists and nuclear pharmacists and should be handy in their bookshelves. The book definitely provides a good basic foundation to students in these disciplines and useful companion to their classroom lectures.

HASSAN Y. ABOUL-ENEIN
King Faisal Specialist Hospital and Research Centre
Kingdom of Saudi Arabia

RADIONUCLIDES IN NEPHROLOGY.

A. Bischof-Delaloye and M. D. Blaufox, Eds. Karger Press, Basel, 1987, 276 pp, $149.50

This publication represents the proceedings of the sixth International Symposium on Radionuclides in Nephrology, held in Lausanne, Switzerland, in May, 1986. It is part of a larger series of works entitled *Contributions to Nephrology.* Including the preface, there are 47 chapters written by participants from twelve different countries. Four of the chapters are review articles, the other 42 are reports of experiments which were presented at the Symposium.

The topics are divided into eight major subheadings which include renal physiology, radiopharmaceuticals, renal function, hypertension, nuclear magnetic resonance, transplantation, metabolic disease, and urological disease. Substantial attention is paid to relatively new developments in nephrology such as captopril renography, diuretic renography, diagnosis of cyclosporine toxicity in the transplanted kidney, nuclear magnetic resonance (NMR) (including Gd-DTPA), and lithotripsy. A few papers deal with subjects as diverse as parathyroid and bone imaging.

The contributers are all well recognized in the field of renal nuclear medicine. By and large, the experiments are well thought out and well executed, and the review papers are well written and very useful. Despite the fact that for the majority of the authors, English is a second language, most of the papers are quite readable and clear. There are few typographical errors.

The quality of reproduction of photographs ranges from fair to excellent. Most scintigrams are clear, but all the NMR images are too small and too crowded. The histologic slides on page 55 are too small to be of much use. There are many graphs and tables which, with some exceptions, tend to be quite busy and not very clear. The paper, print, and binding are of good quality, but the cover is flimsy and not very durable.

This volume speaks to a rather limited audience. Although the review article on renin by Brunner et al, is excellent and would be useful to practicing nuclear physicians, it is about the only such chapter that is. The articles on renal radiopharmacy by Blaufox and on NMR by MacIntyre are very good as well, but the subjects are in such flux at present, that they will soon be obsolete. The experiments are all interesting, but there is little in any of them that can be adapted very readily to clinical practice by most practicing nuclear physicians. Thus, this is not a text to be recommended to residents, technologists, or the great majority of scintigraphers. It might be a useful addition to medical libraries of larger institutions