Imaging of the Newborn, Infant and Young Child, Third Edition
Leonard E. Swischuk, MD, Williams and Wilkins, 1989, 1,053 pp, $16.00

The third edition of *Imaging of the Newborn, Infant and Young Child* is a very readable textbook directed primarily toward practicing general radiologists and radiology residents. As with previous editions, clinically oriented material is presented in an easy-to-follow format. The text is well referenced and illustrated with radiographs of excellent quality. This edition attempts to integrate newer imaging modalities, including magnetic resonance imaging with more traditional radiographic imaging in pediatrics. The text, references and images remain largely the same as in the second edition, although many sections of the text have been expanded and include updated references.

There is a paucity of nuclear medicine throughout the text, limiting the usefulness of Swischuk's new book for those primarily interested in radionuclide techniques. For example, the chapter on the respiratory system (206 pages) contains only a single rectilinear scan of the lung, with no mention of ventilation imaging or newer perfusion imaging techniques. Despite these limitations, the text's clear presentation of pediatric disease and radiographic images in disorders not frequently encountered by many nuclear medicine professionals makes this a worthwhile reference. This book is quite fairly priced at $136.00 for its 1,053 page length containing hundreds of radiographs.

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Advances in Cerebral SPECT Imaging: An Atlas and Guideline for Practitioners
Ronald L. Van Heertum, MD and Ronald S. Tikofsky, PhD, editors, Trivirum Publishing Company, 1989, 129 pp, $38.00

This paperback text makes a significant and useful contribution to the nuclear medicine literature, which will be relevant to anyone involved in clinical neuroimaging. Although nuclear neurology, particularly with SPECT, is still a fairly new and evolving technology (since ca 1980), the editors have done a commendable job in clearly outlining the four major and minor clinical indications for cerebral SPECT imaging: cerebrovascular disease; seizure disorders; dementias; psychiatric disorders, trauma, and tumors. This text is very readable, succinct and accessible. The cases presented are generally of high technical quality and the images give a representative comparison of the capabilities of different vendors' hardware. The editors acknowledge use of only IMP (Spectamine, Roche) since at the time only this agent had received FDA approval. In fairness to some of the newer technetium-based cerebral perfusion agents (Neurolite, Dupont; and Ceretec, Amersham), future editions will include these newer agents as well.

The text is divided into three sections with clinical indications and case examples: general imaging technique, including cerebral anatomy cross-correlated with CT and MRI, patient preparation, image processing and display; disease states, with case examples cross-correlated with CT and MRI; appendices, including quality control of tracer and equipment, and imaging procedural specifics.

In summary, I can enthusiastically endorse this text that admirably fulfills its stated aim of introducing functional brain imaging to imaging clinicians (in nuclear medicine and radiology) and nonimaging clinicians (neurologists, neurosurgeons, and psychiatrists) and showing how to perform and interpret the studies. At a very reasonable price, it belongs in every nuclear medicine reading room, particularly since the role of clinical nuclear neurology will undoubtedly continue to grow.

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A Textbook of Radiology and Imaging
David Sutton, ed, New York: Churchill Livingstone, 1987, 1,857 pp, $250.00

This compendious, two-volume book is the fourth edition of one of the standard textbooks of general radiology. According to the book's editor, the major innovation in the most recent edition is the incorporation of newer imaging techniques, especially magnetic resonance imaging (MRI), into the general text whenever possible. When that has proved unwieldy, it is the author's intention to provide a comprehensive review of these imaging modalities in individual chapters devoted to computed tomography, ultrasound, and MRI at the end of the book.

The text is divided into eight parts, four in each volume, with seven parts each dedicated to a different organ system and the final part assigned to imaging techniques. Some, but not all, of the parts begin with introductory chapters of a general nature, emphasizing normal anatomy and different standard methods of examination. These are valuable summaries of the basic information which would be of interest to medical students, nonradiologists and those in the early stages of radiology training. The remainder of each part is divided into chapters according to disease entities or according to anatomic considerations.

The book is printed on high quality paper and there are a large number of images, which usually clearly demonstrate the relevant radiographic findings, and which are accompanied by succinct and well-written captions. In a few sections, e.g., that on congenital heart disease, there are a number of very informative diagrams. However, despite the written claims of the editor, the emphasis in this book appears to be on plain film radiography, and this is reflected in excellent plain film images. Unfortunately, the computed tomographic images are, in many sections, limited in number and often barely adequate, with many seemingly obtained from early generation scanners. Similarly, the nuclear medicine scan images are relatively few in number, and there are no images to illustrate some of the clinical scena-

rios in which radioisotope imaging is most useful and commonly used, such as occult gastrointestinal hemorrhage or testicular torsion.

There is, without question, a large body of information presented in this book. However, most of the information is presented as a large number of thumbnail sketches of disease processes. One feels as though a large number of disease states are simply named and described to the reader. In fact, much of the actual practice of radiology consists of recognizing a radiologic finding and then assigning a weighted differential diagnosis. There is a surprising lack of discussion of radiologic findings in this book. Because of this basic flaw, very few of the parts of this book could come close to rivaling any standard basic textbook in the corresponding field of radiology. On the other hand, this book will prove most helpful as a reference book for those interested in looking up the radiologic findings of a specific disease process.

Although the editor intended to incorporate the most recent advances in radiologic imaging into the individual parts of the book, this has not, in fact, been done. Instead, they are basically reviewed at the end of the second volume. Thus, one does not achieve a true sense of the relative merits and limitations of each imaging modality which, after all, is of great importance to the radiologist. In addition, the bibliographies at the end of each chapter are limited in length and, insofar as most of the references are earlier than 1984, they are of limited utility.

The book, therefore, suffers from a number of significant limitations. However, since this book presents such a broad range of information, it may be of value as a reference book for both radiologists and nonradiologists.

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Pharmaceuticals in Medical Imaging: Radiologic Contrast Media, Radiopharmaceuticals, Enhancement Agents for Magnetic Resonance Imaging and Ultrasound
D. P. Swanson, H. M. Chilton, J. H. Thrall, Eds., Macmillan Publishing Company, New York, Toronto, London, 1989, 736 pp, $135.00

In this text, Drs. Swanson, Chilton, and Thrall have attempted to assemble the state-of-the-art knowledge on contrast agents and radiopharmaceuticals used in medical imaging. The book is organized into three sections dealing with radiopaque contrast media (8 chapters), radiopharmaceuticals (11 chapters), and enhancement agents for magnetic resonance imaging and ultrasound (3 chapters). Additionally, appendices on units of radioactivity, methods for prevention of thyroid uptake of radioiodine, and drugs for the mitigation of internal radiocontamination have been provided.

Several authors have contributed to the section on radiocontrast agents. Chapter 1 is devoted to the chemistry, pharmacokinetics, physiologic effects, drug interaction, pharmaco-angiography, and clinical considerations in the utilization of angiographic contrast media. Also, an in-depth discussion of the interventional administration of vasoactive drugs for increasing diagnostic efficacy of angiographic procedures is included, which is useful and relevant. However, no reference has been made to recently reported clinical complications associated with nonionic contrast media, such as their thrombotic potential and nephrotoxicitiy in high risk patients. The following chapters (2–8) discuss thoroughly the practical aspects of contrast media usage in urography, computed tomography, myelography, gastrointestinal examination, cholecystography, cholangiography, arthrography, and prevention of contrast induced adverse reactions. Each chapter is concise and focuses on selecting contrast agents, dosage, patient preparation, contraindications, and precautions. The chapter on prevention of adverse reactions to contrast media has been treated fairly, although it does not offer new insight.

The major thrust of this book is, however, on radiopharmaceuticals. The subject matter has been covered exhaustively from fundamentals to diagnostic application in central nervous system, endocrine system, lung, cardiac, tumor, bone, and bone marrow imaging. The last two chapters discuss the therapeutic application of radiopharmaceuticals in thyroid and hematologic disorders. All chapters in this section are written authoritatively and draw their strength from an extensive clinical experience of each contributing author. The last section describes enhancement agents for MRI and ultrasound imaging. There is nothing unique about this presentation.

In the final analysis, this book has reasonably up to date information on pharmaceuticals in medical imaging. A large body of clinical and technical data is condensed in tables, figures, radiographs, scintigrams, and scintiphotos. References listed after each chapter are adequate. However, several landmark articles have been omitted. The index is well-arranged. In my opinion, this book is most helpful to radiologists, specialists in nuclear medicine, residents, and technologists. Those with research interest in diagnostic radiology or nuclear medicine may have to wait for yet another publication.

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Books Received

Edeiken's Roentgen Diagnosis of Diseases of Bone, Volumes 1 & 2. *J. Edeiken, Murray Dalinka, and David Karasick, Baltimore, Williams and Wilkins, Volume 1--1,084 pp, Volume 2--1,832 pp, 1990, $195.00.*

Two-Dimensional Echocardiography and Cardiac Doppler, Second Edition. *Jay N. Schapira, John G. Harold, eds, and Clain Beeder, Associate Editor, Baltimore, Williams and Wilkins, 1990, 670 pp, $99.50.*

Interventional Ultrasound. *John McGahan, ed, Baltimore, Williams and Wilkins, 1990, 283 pp, $59.50.*

Nonionizing Radiation Protection—Second Edition. *Michael J. Suess and Deirdre A. Benwell-Morison, eds, Vienna, World Health Organization, 1990, 346 pp, $340.00.*