JNMT Bookshelf

CARDIAC NUCLEAR MEDICINE

B.L. Holman, H.L. Abrams, E. Zeitler, eds., Springer-Verlag, New York, 1980, 88 pp, \$19.00

This monograph comprises number 3 (Volume 2) of the Springer journal *Cardiovascular Radiology*. The monograph is a state-of-the-art survey of radionuclide techniques used in the diagnosis of cardiac disease. Well suited for the physician, the articles cover first-pass angiocardiography, gated ventriculography, myocardial scintigraphy with infarct-avid tracers, quantitative assessment of thallium-201 images, Tl-201 myocardial perfusion scintigraphy during rest and exercise, assessment of regional myocardial blood flow using the inert gas washout technique, and emission tomography of the heart. The references for each article are extensive and the quality of image reproduction is excellent. This text would be an asset to any nuclear medicine departmental library.

> GARY D. GALLAMORE Jersey Shore Medical Center Neptune, New Jersey

HUMAN ANATOMY AND PHYSIOLOGY

Alvin Silverstein, John Wiley & Sons, New York, 1980, 887 pp, \$24.95.

The author, who is chairman of a college biological sciences department, presents a very detailed textbook that is punctuated by fine illustrations. In 39 chapters he explores the areas of development, nutrition, disease and body defenses, biomedical frontiers, and societal impact on health sciences. Review questions follow each chapter.

Diagnosis of disease is touched lightly, with little information directly relating to nuclear medicine. A section titled "Tests of Thyroid Function" shows a poor scan and mentions BMRs and PBIs. One must also cheerfully ignore a comment found in the "Biomedical Frontiers" section which states that "the CAT-scanner can successfully replace other, potentially more dangerous or less accurate diagnostic techniques, such as . . . radionuclide scanning."

This reasonably-priced textbook would be an appropriate addition to the library of a nuclear medicine technology training program. Occasional typographical errors do not mar the otherwise understandable prose.

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RADIOPHARMACEUTICALS II: PROCEEDINGS OF THE SECOND INTERNATIONAL SYMPOSIUM ON RADIO-PHARMACEUTICALS

Society of Nuclear Medicine, New York, 867 pp, \$40.00

This book is a compilation of papers presented at the Second International Symposium on Radiopharmaceuticals. A wide breadth of subject matter is covered beginning with international regulatory affairs relating to radiopharmaceuticals. This section opens with a keynote address by Governor Dixie Lee Ray, former AEC chairman, speaking on "Potential Uses of Atomic Energy in Light of Increased Government Regulations." Other papers include a description of the USFDA system for classifying and approving New Drug Applications for radiopharmaceuticals, the regulation of radiopharmaceuticals in Canada, and a U.S. manufacturer's viewpoint on regulations.

The remainder of the book is divided into specialized subject areas introduced by a review article written by an expert in the field and followed by scientific papers on the subject. These areas include quality control in the hospital, organic radiopharmaceuticals, inorganic radiopharmaceuticals, oncology, hematology, pharmacokinetics, cardiopulmonary, RES/biliary and skeletal system agents, pancreas, prostate and adrenal agents, and radionuclide production. Subject areas not followed by scientific papers include functional imaging, the central nervous system, radioimmunoassay, kidney, and thyroid.

Review articles are well written and up-to-date.

K. Kristensen covers quality assurance of radiopharmaceuticals, describes the procedures followed by Isotope Pharmacy in Denmark, and discusses the results of an extensive compliance study of Tc-99m labeled kits. He concludes with suggestions for a hospital quality control program for radiopharmaceuticals.

A.P. Wolf presents a practical approach in updating since 1975, the trends and directions in design and preparation of organic radiopharmaceuticals labeled with positron emitters with particular attention given to nuclide production, specialized technology, and the problems encountered with the need for carrier-free materials.

E. Deutch presents a very clear description of the chemistries of gallium and technetium radiopharmaceuticals with consideration of their periodic relationships. Also discussed are factors such as competitive equilibria and kinetic and thermodynamic parameters influencing biodistribution of gallium agents as well as the techniques of single crystal x-ray analysis, electrochemistry, and *(continued on next page)*