

HEART AND CORONARY ARTERIES. Wallace A. McAlpine. New York, Springer-Verlag, 1975, 224 pp, \$86.00.

This magnificent atlas is a landmark in the study and presentation of the heart and coronary arteries. Just a brief glance impresses one with the depth and detail of the work. Approximately one-half of the text is devoted to the heart and the other half to the coronary arteries. The color figures and diagrams are superb.

In the first section the author describes the techniques used, including the perfusion fixation and radiographic simulation of the heart as viewed in the living person. The disposition of the cardiac structures in the horizontal and sagittal planes are described and illustrated.

In the second section, the author describes the aorto-ventricular unit, the ventricles, the atria, the mitral valve, and the great vessels, and he illustrates the spatial clinical considerations from multiple projections (including diagrams). The photography has reproduced the color and texture of the heart as if it were still viable, and topographic landmarks are well delineated. His dissections of the heart are logical and instructive.

The third section discusses and illustrates the origins, course, branches, and anatomic variations of the coronary arteries. Again the multiple projections and partial dissections, beautifully illustrated and explained diagrammatically, reassure one that accomplishments on such a plane of excellence are still possible.

The author's approach to the anatomic relationships of the heart will provide practitioners of nuclear medicine a one-to-one correlation without the necessity of mental re-orientation so frequently necessary with anatomic atlases. The author is to be congratulated for an original work that may be equalled, but will be difficult to surpass.

FRANK H. DELAND, M.D.
University of Kentucky
Lexington, Kentucky

RENAL FUNCTION EVALUATION (Audio-visual program, 73 slides with 30-min cassette tape). M. W. Blaufox. Carle Place, N.Y., Nuclear Associates, \$135.00.

This slide and audio-tape program on renal function evaluation is well done from both the technical and scientific viewpoint. The program first presents a simplified but good review of renal anatomy, including discussions of the nephron, renal arteries and veins, glomerulus, proximal tubule, Henle's loop, and collecting tubules. The anatomy is followed by a review of physiology, including functional aspects of the glomerulus, tubular secretion and absorption, renal clearance, extractions and ratios, and renal and plasma blood flow. After discussing the methods of measuring glomerular filtration, the author enumerates the radiolabeled agents that can be used for determining glomerular filtration

rates and effective renal plasma flow and for imaging the kidneys; the discussion includes the pros and cons of each agent. A simplified renal compartment system is presented and applied to radiopharmaceuticals and mathematical analysis for plasma clearance. The author rightly cautions about the pitfalls that may be encountered with the use of simplified mathematical techniques. The discussion of clearance determinations with hippuran in renal transplants is short but lucid. An excellent series of slides illustrates the correlation between the renal handling of hippuran and the component segments of a hippuran renogram; this is followed by an explanation of the clinical advantage of the renogram. Sample renograms are presented in cases of obstruction and renal hypertension. Determination of residual bladder urine by radionuclides is also illustrated. The final portion of the teaching program discusses and illustrates combined imaging and the functional procedures that can be obtained by means of the scintillation camera and appropriate data-handling methods.

Although the entire teaching unit is on a relatively elementary level, the information is presented in such a manner that an adequate understanding of renal function and evaluation is provided for both beginning students and clinicians.

FRANK H. DELAND, M.D.
University of Kentucky
Lexington, Kentucky

ADMINISTRATION OF A RADIOLOGY DEPARTMENT (Hints for Day-to-Day Operation). Murray L. Janower. Springfield, Ill., C. C. Thomas, 1976, 72 pp, \$7.50.

This brief publication (59 pages of text) is indeed a useful series of hints by an experienced administrator on the operation of a radiology department. Key components of the radiologic process (patient control, examination, file room, etc.) are separately analyzed and the author's methods for maintaining efficiency are described. The author shows how common sense, simple statistics, and simple evaluation techniques allow a reasonable systems-analysis approach in a hospital radiology or nuclear medicine department. The publication is not meant to be a textbook or an encyclopedia, but a description of methods that have worked. Although the book relates to roentgenographic procedures, it will be of interest to nuclear medicine physicians who are responsible for imaging procedures in hospital departments. Its small size and practical approach make easy reading and I recommend it for the library of any department with administrative problems.

RONALD G. EVENS, M.D.
Mallinckrodt Institute of Radiology
Washington University School of Medicine
St. Louis, Missouri