seven-pin hole, rotating slant-hole systems, and many others, are not described. Essential components of nuclear medicine tomographic reconstruction methods, including attenuation corrections and incomplete projection sets, are not included. In addition, the book includes many references to the SNARK 77 software system for reconstruction by projections that was developed by the author and his associates for research and teaching. It is not likely that the reader will have access to this system, or anyone that is personally familiar with it.

Despite these limitations, the book is an excellent introduction to the subject and is well written, thoughtfully organized, and a pleasure to read. This book is essential reading for anyone concerned with computed tomographic methods.

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DORLAND'S ILLUSTRATED MEDICAL DICTIONARY, 26TH ED.
Philadelphia, W. B. Saunders Co., 1981, 1485 pp., $32.50 (indexed $37.50)

This new edition of a standard in medical dictionaries has been published seven years after the previous one. The approximately 8,000 new terms that have been added reflect the rapid advances in medicine during these years. Fortunately, however, this new edition has only a 13% increase in the number of pages, because the size of the pages has been enlarged. In addition, the paper is now a blue-white, which makes reading much easier.

Besides the new definitions, about 15% of the others have been modified to convey the newer meanings that the terms have assumed with advancing knowledge. Greater emphasis has been placed on the fields of pharmacology, genetics, immunology, and biochemistry, all of which are undergoing expansion. Cognizance of the rapid changes in the scientific related to medicine indicates the progressive attitude of the editors.

Although not as fundamental as the appreciation of the current status of medical sciences, the continued use of phonetic spelling with appropriate diacritics provides a most practical approach to pronunciation. Perhaps this point may not be considered significantly important by some; however, communication at its best is frequently difficult, and without standards, miscommunication is inevitable. For those interested in the study of words, there is a brief but comprehensive introductory section on medical etymology.

Dorland's dictionary has always been noted for its excellent illustrations, and this edition contains nearly 70 additional ones. A splendid example of a new illustration that represents the state of contemporary medicine is the three-dimensional pictorial of cell organelles and cell membranes. The combination of the different paper and improved printing has produced striking illustrations that appear sharper and more legible.

The 26th edition of Dorland's Medical Dictionary continues to maintain the quality expected of this series of publications. Undoubtedly, it will remain a standard for physicians and other scientists.

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Papers presented in the Proceedings of the 4th International Symposium on Radionuclides in Nephrology are divided into four parts: Renal Clearance and Imaging, Renal Hemodynamics and Hypertension, Kinetics, and Chronic Renal Failure and Transplantation.

Part One is interesting to the clinician in nuclear medicine for it deals primarily with attempts to simplify the standard and classic clearance techniques requiring urinary and plasma collection for the evaluation of total- and split-renal function. Curve analysis and computer-assisted methods using iodohippurate tagged with I-131 or I-123 are favored by most authors. Isomers of dimercaptosuccinic acid and other chelates, such as monomercaptosuccinic acid, are evaluated for the efficacy of renal cortical fixation, ease of preparation, and stability of the renal cortical radiopharmaceutical. In comments to the panel session on clearance determination from a single plasma sample, M.D. Blaufox points out that the biggest current problem is that although many new and simplified techniques for measuring renal function have been introduced, very few have been applied adequately and studied in physiologic and clinical pathological states.

Just as the section on renal clearance and imaging is directed primarily toward the clinician in nuclear medicine, Part Two is of most interest to the basic researcher in nuclear nephrology. Techniques for studying intrarenal hemodynamics and their control by the renin angiotensin system are presented that utilize various markers such as recording of plasma and red cell transit times, inert gas washout, microspheres, and the use of autoradiography of iodohippurate (I-131) to study adrenergic receptor sites in the juxtaglomerular apparatus.

Part Three on kinetics includes miscellaneous papers on specific nephron tracer localization and the nephrotoxic effects of aminglycoside antibiotics. An interesting paper dealing with the determination of bone calcium density using local bone neutron activation in the uremic patient treated by hemodialysis is included in this section. Of particular clinical value is a paper on the use of the "stress" diuresis renogram indicated in patients with equivocal pelvo-ureteric obstruction.

The fourth and last part is dedicated to chronic renal failure and transplantation. Radionuclide assessment of complications of chronic hemodialysis and renal failure affecting the skeletal system, myocardial function, and certain pharmacodynamics are discussed. The section on renal transplants deals primarily with iodohippurate tagged with I-131 and xenon-133 techniques for the evaluation of the ischemic or acutely rejecting transplant and the transplant with urinary tract obstruction.

In general, the papers are excellent in quality, of interest to both the nephrology-minded clinician and the research-oriented nuclear physicist, and may well serve as a stimulus for future clinical and basic investigatory activities.