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## PRINCIPLES OF NUCLEAR MEDICINE, 2nd ed.

Henry N. Wagner, Jr., Zsolt Szabo and Julia W. Buchanan, eds. Philadelphia, PA: W.B. Saunders Co.; 1995; 1254 pages, \$235.00.

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The first edition of this book was published in 1968. It was the first professional publication that I purchased after entering nuclear medicine in 1969, so it was with much interest that I reviewed the second edition. Given the dramatic changes that have taken place in nuclear medicine over the last quarter century, much of the content is new or drastically revised. As Dr. Evens points out in the foreword of the book, this is "not just a second edition." More than 150 contributors have provided well-referenced, up-to-date information.

Comprehensive does not adequately describe the scope of this book that covers the past, present and future of nuclear medicine. Fundamentals, current practice and advances in nuclear medicine are all included in this text, and belie its title. Perhaps the

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title should be *Principles and More*. Approximately half of the 51 chapters is devoted to physics and biology related to nuclear medicine, instrumentation and computers, and radionuclide and tracer production. The first chapter, "Nuclear Medicine: What It Is, What It Does," should be required reading for all nuclear medicine students. In this chapter, Dr. Wagner explains why nuclear medicine is really molecular medicine and sets the stage for the material presented in the four succeeding chapters, "Genes and Disease," "Intercellular and Intracellular Communication," "Transport Systems" and "Glucose Metabolism." These chapters expand on Dr. Wagner's discussion and summarize background information on these topics that is not typically included in nuclear medicine texts.

Most of the remaining chapters address organ systems or diseases with an emphasis on cardiology, neurology and oncology. Chapters on radiation safety, radiation accidents and low-

level radioactive waste are also included. Many of the chapters are lengthy, but are divided into manageable sections. References are conveniently placed at the end of each section rather than at the ends of chapters. According to the publisher, there are more than 1500 illustrations. The graphics are well done and informative, and the reproductions of diagnostic images are of good quality.

This book is more an encyclopedia than a textbook. You would probably not read it cover to cover but consult it as a comprehensive source of information prepared by the experts in the field. Educators and technologists will find this book a useful reference. Depending upon their basic science preparation, nuclear medicine technology students may find some of the material difficult, but certain chapters may expand on material in their other texts. The price of the book, however, places it out of the reach of students, most technologists and some educational programs.

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