

NMT Bookshelf

PRACTICAL COMPETITIVE BINDING ASSAY METHODS

John Ransom, St. Louis, C.V. Mosby, 1976, 132 pp, \$8.95

The author of this book says that his purpose in writing it was "to open up the technology of immunology." Presumably by this he means the book is intended for use by technologists with no other background in immunochemistry; if so, the book admirably fulfills this intent and should be widely read. It includes chapters on the general principles of binding analysis, and antigen-antibody reactions, a bare-bones outline about radioactive isotopes and their use, the essential details of tracer methodology, separation methods, and an assortment of assays which illustrate the kinds of procedures a technologist is likely to be asked to perform.

The chapters on labeling of macromolecules and preparation of antibodies include sufficient information to enable the technologist to do these procedures successfully. One word of caution is in order, however: the ^{125}I iodination procedure should include a warning about the use of a good chemical fume hood when working with this volatile isotope; this precaution is listed in a previous chapter on isotope characteristics where it may easily be missed. One may also take exception to the statement that the measurement of angiotensin II "appears to be the most practical one for clinical purposes." The great majority of laboratories measuring plasma renin activity do so by measuring angiotensin I and there is much more clinical data derived from measurement of the latter than from the former. Moreover, this is a technically demanding procedure whose requirements remain controversial, and the beginning technologist is better advised to stay with the pack.

On balance, this is a well written and thoroughly informative book which belongs in the library of every RIA practitioner as well as those peripherally concerned with the technology of this rapidly growing method of bioanalysis. It is concise and accurate but not elementary, and may be recommended for use as a textbook in an RIA training course.

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PEDIATRIC NUCLEAR MEDICINE

Leonard Freeman and M. Donald Blaufox, eds, New York, Grune & Stratton, 1975, 211 pp, \$15.00

A broad overview of the subject of pediatric nuclear medicine is provided by 14 contributors in this hard-cover reprint of *Seminars in Nuclear Medicine*, orig-

inally published in Oct. 1972 and Jan. 1973. The information in this book is based upon experience gained before 1972; hence, much of the material is outdated by 1976 practice. The material on bone scanning has been updated with an additional chapter on scanning beyond strontium and fluorine. The book does, however, serve as a good introduction to pediatric nuclear medicine and would be valuable as a reference in any nuclear medicine laboratory.

Each author directs his comments to practitioners of adult nuclear medicine and identifies the problems of translating technique to pediatric practice. Each chapter contains a discussion of the choice of radiopharmaceutical, specific disease states, and the indications for the use of radionuclide techniques in the diagnosis of those diseases. Illustrations of characteristic findings in many disease states are shown; however, many of these illustrations are rectilinear scans. Today most pediatric imaging is done on the scintillation camera. Excellent information is given on radiopharmaceutical dosimetry and will be used as a reference for a long time to come. The problem of informed consent and the medical legal aspects of radionuclide use in children are well discussed. These topics and the additional chapter on bone scanning make the book well worth the purchase price. Much of the other material serves as a good general introduction and discussion of the techniques involved in pediatric imaging.

Nuclear medicine technologists will find this book to be valuable as a reference in their laboratory; however, few pediatric cases are seen. There is a definite paucity of information in the literature on pediatric nuclear medicine procedures and this text helps to fill the void.

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NCRP REPORT NUMBER 45: NATURAL BACKGROUND RADIATION IN THE UNITED STATES

National Council on Radiation Protection and Measurements Publications, Washington, DC, 1975, 163pp, \$5.00

NCRP Report No. 45 follows the format used in all NCRP publications. That is, it presents a large amount of detailed information in a very concise, well-documented fashion.

This report is concerned with the assessment of the radiation dose to the population from natural background radiation. Included are the absorbed doses to

the population due to radiation from cosmic sources, radionuclides in the earth, internally deposited radionuclides, inhaled radioactivity, and fallout from nuclear weapons tests.

The primary usefulness of this report is seen to be in the areas of applied health physics and environmental

health, most probably dealing with situations involving contamination from reactor releases.

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