

JNMT Bookshelf

HOW TO WRITE AND PUBLISH PAPERS IN THE MEDICAL SCIENCES

Edward J. Huth, Institute for Scientific Information (ISI) Press, Philadelphia, 1982, 203 pp, \$11.95 paperback, \$17.95 cloth-bound.

Most technologists, physicians, and scientists have had little or no formal instruction in scientific or medical writing. The author of this book has designed this text to serve as a guide for inexperienced writers and as a reference for the experienced author. The 20 chapters cover four major areas of writing: preparation, organization and content, writing and revising, and publication of a paper.

Each chapter focuses on one particular type of paper or a specific aspect of writing a paper. The author presents his methods and suggestions with exceptional clarity. The book's main thrust is to help authors logically sort through and arrange the material they wish to present. The author recommends applying the "so-what" test to the information available to find the appropriate audience and type of paper for the information. Although some of the chapters are directed toward preparing materials from a scientific investigation, there is very helpful information on writing case reports, reviews, etc. Also included are chapters and appendices on preparing tables, illustrations, and references, searching the literature, etc.

This book will be very valuable in helping an author organize the material he wishes to submit for publication in a clear and concise manuscript. The author has provided excellent suggestions to assist writers in organizing and presenting their information.

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(SNM 212) BASIC FACTORS OF NMR IMAGING

Peter L. Davis, Society of Nuclear Medicine, New York, 1982 (audiovisual), \$55.00 SNM members; \$66.00 nonmembers.

Hospitals of the future are likely to include imaging sections, which will house such modalities as nuclear medicine, radiology, ultrasound, computed tomography, digital radiology—and nuclear magnetic resonance (NMR), the newest of these. As technologists, it is essential that we keep abreast of new developments and extend our technical skills whenever possible.

In this 30-minute (27-slide) presentation, Dr. Davis introduces the principles of NMR imaging through the use of case studies and comprehensible graphs. Viewers are shown how hydrogen density, T_1 and T_2 relaxation times, and tissue movement affect the NMR signal and thus the resulting images. He further explains that although NMR is very sensitive, it is not necessarily specific. Dr. Davis does point out that NMR

has been able to differentiate between types of tissue in epidermoid and teratoma tumors.

Contrast agents for NMR and their potential uses are discussed. Two of these, water (injected intravenously) and mineral water (swallowed), increase hydrogen density in tissue and the gastrointestinal tract, thus enhancing images—but both have deleterious side effects. Dr. Davis does go on to note that it is possible to change the T_1 and T_2 relaxation times by introducing paramagnetic material—which then becomes slightly magnetic and enhances the images accordingly.

The relative safety of NMR in the clinical setting is also discussed. The speaker emphasizes that the magnetic field is relatively low and that studies done in England have shown no adverse effects except in patients with pacemakers. In the same vein, technologists who perform NMR imaging cannot wear metallic objects and patients must be transported on non-magnetic wheel chairs and stretchers.

This audiovisual, along with SNM 213, *Clinical Applications of NMR*, was originally given before a live audience. Consequently you may need an imaginative pointer to locate landmarks and abnormalities on the slides that the speaker is referring to in the audio portion of the program.

In conclusion, this material will augment your knowledge of NMR, including how it works and the types of tissues it can differentiate. It would make an excellent library reference for technologists, students, and physicians.

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(SNM 213) CLINICAL APPLICATIONS OF NMR

Peter L. Davis, Society of Nuclear Medicine, New York, 1982 (audiovisual), \$55.00 SNM members; \$66.00 nonmembers.

This 35-minute (63-slide) audiovisual is the sequel to SNM 212, which is reviewed above. Like SNM 212, this audiovisual was originally presented to a live audience and like SNM 212, it has the same flaw: when the speaker points out a certain area of a slide or image, the viewer is left to his wits to do the same.

But patience and perseverance will make it a worthwhile effort, especially because slides on NMR are not readily available.

Dr. Davis compares NMR's image intensity with various tissue types, i.e., fat, brain, liver, kidney, muscle, and bone. He then demonstrates how rapid or increased blood flow assist in diagnosing vessel disease. He feels that cardiac NMR imaging can be performed on slower beating hearts because the

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