

HOW TECHNOLOGISTS CAN GAIN THE MOST OUT OF CONTINUING EDUCATION

To the Editor: I would like to respond to a recent letter to the editor, written by Mary E. Klug regarding the growing shortage of nuclear medicine technologists.

Nuclear medicine has become a firmly established discipline. Yet there is already increasing pressure for further specialization as the volume and complexity of tasks performed by nuclear medicine technologists increase. Today nuclear medicine is in a state of flux. Tremendous changes are occurring, particularly in radiopharmacy, instrumentation, and dynamic imaging. In some instances, there may be a dozen acceptable ways to perform a procedure.

Continuing education should be an important and vital function for all nuclear medicine technologists. As professionals, we should recognize the complexity and fulfillment of our role in the health care delivery system. Some have found that continuing education is becoming important in their employment status, either in the hiring or promotional aspect. As consumer groups grow, there is even more importance put on continuing education relative to the technologists' duties.

The question most often asked is, "Where do I go for continuing education?" But perhaps we should first ask ourselves, "What do we want out of continuing education?"

There are many avenues open for continuing education, some of which can be pursued in your own department. Some of these you might wish to consider are:

- 1. Formal Education.** Going back to college is perhaps the easiest way to get credit for your efforts. An "in vivo" technologist may know little about the "in vitro" procedures. By going back to school or enrolling in classes at a nearby teaching hospital, a technologist can then pursue a new specialty.

- 2. Seminars.** Attending local seminars given by professional associations can be a good source for updating technical education. One drawback to seminars and workshops is rising costs. Some hospitals may have limited funds available to technologists wishing to attend such courses.

- 3. Journal Clubs.** Even if you can afford to go back to school, nothing is more important to your education than reading professional journals. In some departments, journal clubs meet at least once a month to review new developments.

- 4. Writing.** There may have been many times you have had to write papers, and by the time you have completed the research, you have learned more about the subject than you knew before you started. Many hospitals have in-house newsletters that are published to help others learn about your specialty. This can be a useful tool in sharpening communication skills.

- 5. Research.** Setting up new procedures, revising old ones, or getting rid of outdated ones requires a certain amount of research. Letting your supervisor know of your research may result in an excellent tool for growth in your department.

- 6. Audiovisual Aids.** Programmed learning aids are now accessible to many departments through professional societies. The expense of these self-instruction aids can be kept to a minimum by renting. Some aids are available free of charge from many suppliers. If you are really energetic, you can even make your own tapes and slides.

- 7. Hospital Events.** Many hospitals hold "in-house" seminars that can be of great benefit in developing your clinical education.

- 8. Communication.** Don't be afraid to ask questions. When you have a specific problem, don't hesitate

to call or write another institution to get advice about a particular new procedure that they may be performing.

Continuing education, as a source of developing skills, has many paths that can be explored. These are just a few options that might be open to you. If you define your needs and goals, you can discover alternative paths better suited for your needs.

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REFERENCE

1. Klug ME. A thankless profession [Letter]. *J Nucl Med Technol* 1990;18:214.

STEREISOMERS OF HMPAO VERSUS PRIMARY AND SECONDARY FORMS OF TECHNETIUM-99m-HMPAO

To the Editor: We read with great interest the timely commentary by Karesh on the preparation of technetium-99m- (^{99m}Tc) exametazime (1). However, we can only assume that this commentary was read by very few chemical scientists, as it appears to contain scientific errors. In particular, the author displays a lack of appreciation of the stereochemistry of the radiopharmaceutical exametazime (more commonly referred to as hexamethyl propyleneamine oxime or HMPAO) about which he is writing. It seems that confusion exists in the author's mind as to the distinction between the *meso* and *d,l* stereoisomers of the parent chelate and the primary and secondary forms of the ^{99m}Tc complex of HMPAO. Karesh does not actually refer to the *d,l* and *meso* isomers, instead he appears to confuse the primary and secondary technetium complexes with stereoisomers.

In a study of the structure of the ^{99m}Tc-HMPAO complexes which used x-ray crystallography, NMR spectroscopy, IR spectroscopy, and UV-visible spectroscopy, Jurisson et al. (2) did not mention any stereoisomers of ^{99m}Tc (*d,l*) HMPAO. They do, however, clearly differentiate