way was to give SNMTS leadership tools to aid in their personal and professional development. A formalized mentoring program was rolled out at the mid-winter meeting to ensure that the leadership pool is always full and that everyone who desires to be a leader reaches his or her maximum potential.

CT, PET Exams

CNMTs now have the ability to sit for the ASRT CT exam, and RTs will be able to sit for the Nuclear Medicine Technology Certification Board (NMTCB) PET exam. The first PET specialty exam was administered in October. The NMTCB showed extraordinary initiative in getting the exam up and running.

The advanced practice NMT career pathway is well on its way to becoming a reality. A preliminary physician survey was completed. A second larger survey was funded and is now in the works. We learned valuable lessons from the ASRT regarding what would work well with radiologists and nuclear medicine physicians. We still expect bumps in the road, but we have a clear direction and firm initiative.

Education and Research Foundation

SNM and SNMTS have formed a strategic alliance with the Education and Research Foundation, which is the funding arm of SNMTS. The first technologist research grant was awarded, and the Paul Cole Scholarship Fund received an additional $10,000 in funds for the coming year. Look for exciting future opportunities for grants, awards, and scholarships as this new partnership progresses.

You can see that 2004 was a very good year. I look to even more successes in the year ahead. It is an honor and a pleasure to serve as SNMTS president. Thank you for your support, the challenges, and the opportunity to serve.

Nanci A. Burchell, BS, CNMT, FSNMTS
President, SNMTS

From the SNM Executive Director: SNM Readies MOC/Lifelong Learning Program

Five years ago the American Board of Medical Specialties (ABMS) voted unanimously to expand and replace recertification programs with maintenance of certification (MOC) programs—more comprehensive programs to assess the ongoing competence of physician specialists and their ability to provide quality health care. MOC requirements for nuclear medicine professionals take effect this year. In response to this action, SNM will debut its comprehensive, innovative MOC program in fall 2005.

In the past, the certification process comprised successful completion of an approved educational program and an evaluation (including an exam). Now nuclear medicine professionals can no longer simply take an exam to renew a certificate; lifelong learning activities must be documented. For example, American Board of Nuclear Medicine (ABNM) members will be required to document that they have completed 100 hours of nuclear medicine-relevant continuing medical education within a 5-year period. In future years, ABMS MOC will attempt to increase the completeness of the evaluation by assessing a professional's performance in practice.

Four Components of MOC

To renew a certification when it expires, a nuclear medicine professional will be required to present evidence of (1) professional standing (medical licensure); (2) a commitment to lifelong learning through continuing education activities and performance in a self-assessment process; (3) cognitive expertise (measured by a written exam every 10 years); and (4) quality of performance in practice (including the quality of patient care, professionalism, communication skills, medical knowledge, practice-based learning and improvement, and systems-based practice).


Virginia Pappas

SNM is tasked by the ABMS with establishing self-assessment materials in all areas of nuclear medicine for ABNM and the American Board of Radiology (ABR) and with developing test questions for the ABR. The Society is doing its best to ensure that the materials are convenient and user friendly. The most challenging project will be developing the tools to measure performance in practice. This component remains undefined for specialists who do not necessarily have direct patient contact in everyday practice.

SNM's Innovative MOC Program

Beginning in the fall, SNM will debut the first of 10 planned systems-based online modules that will help nuclear medicine professionals measure their performance in practice. The modules, complementing existing continuing

(Continued on page 16N)

(Continued from page 14N)
education offerings, will address cardiology; oncology; basic science; neurology; pulmonary; endocrinology; musculoskeletal disorders; genitourinary; gastrointestinal; and other areas, such as hematology, infections, and lymphatics. A CT module will also be included.

These competitively priced modules will offer virtual workstations, providing multimedia graphics and reviews in PET, CT, and/or PET/CT modes. Each module will contain tables, figures, a glossary, and multiple-choice questions (based on clinical decision making), each with a review and test capability. The modules, which will be revised every 3 years, will provide critiques, case studies, surveys, and Web-based checklists and simulations. They will offer complete search capability, indices, and the ability to take notes (and download that information) to develop an individual study guide.

The architects of this innovative program include Alan H. Maurer, MD, chair of the SNM Education Committee; SNM officers; and Lynn Barnes, SNM director of education. Dominique Delbeke, MD, PhD, will serve as chair of the MOC program and will develop a system of module vice chairs, authors, and reviewers.

The program's 3-year business plan and detailed outlines were presented at a summit meeting held at last month's mid-winter meeting. The first 3 demonstration modules (cardiology and oncology) will be available for viewing at the SNM annual meeting, June 18–22, in Toronto. The educational portal from the society's Web site to the MOC programs is expected to be online by September 1.

Although MOC affects physicians, its reach will extend to technologists, radiologists, and scientists. Nuclear medicine technologists are now struggling with changes in continuing education guidelines, which will be required this July. The effects of MOC on our members and the society itself are enormous. SNM stands ready to ease the way for nuclear medicine professionals to continue their lifelong learning with this new MOC program. More information about this initiative will be made available as work progresses in 2005.

Virginia Pappas, CAE
Executive Director, SNM

Physics Applications in Nuclear Medicine: Progress on Many Fronts

The year 2004 was a year of significant progress in the area of physics applications in nuclear medicine. Research marched forward in detector development and reconstruction technology, and new tools became available. Discussion in the dosimetry community about the importance of patient-specific dosimetry continued and was brought to focus at a European congress. Calculational tools, including the OLINDA/EXM code, were developed and released. Electronic resources continued to be a developing field, facilitating international communications and making daily work go faster.

Instrumentation Innovations

New detector materials, imaging tubes, and readout systems are being integrated to create novel detector geometries that are rapidly moving from research to practical clinical imaging devices. Breast imaging devices based on standard NaI crystals and pixelated CsI are being used in different geometries made possible by the use of unrestricted arrays of position-sensitive or multianode photomultiplier tubes. The ability to mount these room temperature devices to crystals arrayed in unusual geometries makes it possible to efficiently surround organs such as the breast in arrays for single-photon or positron imaging. A special session on breast imaging at the 2004 Institute of Electrical and Electronics Engineers Medical Imaging Conference featured a number of the current devices used alone or in conjunction with radiographic imaging ensembles for biopsy correlated nuclear medicine procedures (*1*).

A follow-on to the multiple pinhole dynamic 3D imaging (4D) work for brain flow/function pioneered by the Arizona group has moved from instrumentation to clinical applications (*2–4*). An alternate approach useful in small animals simulated submillimeter resolution in very small regions of a mouse using a commercial 3-head gamma camera with a spherical multipinhole collimator with holes converging on the target region of the body (*5*). Innovations stimulated by the National Institutes of Health (NIH) small animal imaging focus continue to emerge, now joined by major Homeland Security funding for screening devices that attempt to meet the combined need for high sensitivity with energy selectivity.

Many important developments in the field of emission tomography were brought together in an important new

(Continued on page 19N)