in perspectives. The promise of molecular imaging and therapy is also helping to keep the nuclear medicine technology markets strong and fuel the development of increasingly sophisticated small animal and hybrid imaging devices.

SNM has been active as a leader in molecular medicine. The Molecular Imaging Center of Excellence (MICoE), now in its second year, has enjoyed great success in creating new avenues for communication and in drawing in participants from fields outside traditional nuclear medicine practice. Under the forward-looking leadership of editor-in-chief Heinrich Schelbert, MD, PhD, the focus of *The Journal of Nuclear Medicine* (*JNM*) has been expanded to include new areas of molecular imaging that span basic science, diagnosis, and therapy. As editor of Newsline, I have been pleased to reflect this enhanced focus by supplementing our popular From the Literature section with additional molecular imaging briefs and by carrying regular reports on the activities of the SNM MICoE.

The Field of View Expands

The second theme that emerged in reviewing the year's stories in Newsline, *JNM*, and other sources was the sheer diversity that now characterizes our field. As recently as 20 years ago, a nuclear medicine practitioner could reasonably be assumed to have familiarity with the entire field. The numbers of procedures, modalities, and radionuclides (and their various combinations) were limited, and, with daily experience, the average nuclear medicine physician could be expected to have at least some degree of expertise across the entire spectrum. Today, a quick review of the pages of *JNM* shows the dizzying range of basic, pharmacologic, dosimetric, small animal, and clinical research and practice in our field. Not only is our armamentarium of equipment and radiopharmaceuticals expanding at exponential rates, but the field now includes areas such as CT, optical, and ultrasound techniques that were once outside the purview of nuclear medicine training.

This is only 1 of the reasons behind the stepped-up requirements for lifelong learning and maintenance of certification, as supported by numerous SNM programs and reported on regularly here in Newsline. As physicians, physicists, and technologists, we are all challenged by the broad range of endeavors that our field now encompasses. Comprehensive expertise is virtually impossible, and keeping up with even a broad understanding of innovations is difficult. Even staying current in terminology, from microbubbles to nanocarbon tubules, can be daunting. Along with many others in the field, I suspect that we are at a turning point past which greater and greater specialization will be required within our field.

The rewards, of course, will be even more new discoveries that benefit both today's and tomorrow's patients. The danger lies in the loss of the ability to take a comprehensive, large-field-of-view look at nuclear medicine as a whole and in the possibility of subdisciplinary fragmentation and encroachment (rather than partnership) with other disciplines. This may simply be a marker of scientific progress. In fact, within our lifetimes nuclear medicine may come to be viewed as the progenitor of numerous fields, no longer a discipline itself but the forerunner and pioneer of distinct areas of research and practice. Only time—and perspective—will tell.

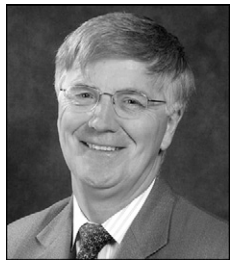
I hope that 2008 brings productivity and prosperity to all Newsline readers, whatever their fields of endeavor, and that the year will see both resolutions to old challenges and beneficial results from the novel synergies we are seeing at every level of research and practice.

Conrad Nagle, MD
Editor, Newsline

Continuing and Accumulating Successes

SNM has accomplished a great deal this past year—for our patients, for the public, and for the profession. These successes have occurred in the halls of Congress, with regulatory agencies, and with our professional colleagues. We have voiced concerns in the national media about critical radioisotope shortages. We have received support from the National Academy of Sciences (NAS) for future investments in nuclear medicine and molecular imaging research. We have continued to monitor and press on vital practice issues. These successes speak well for continued growth and national prominence that SNM has gained in the public eye.

As 2007 ended, SNM achieved a major legislative victory as approximately $17.5 million for basic nuclear medicine research was included in a federal appropriations package for the Department of Energy (DOE) Office of Science for 2008. We have fought hard for 3 years to achieve this victory, restoring funding cut from the DOE budget in the 2006 budget year. Congress first began funding nuclear medicine research with the passage of the Atomic Energy Act of 1954, and that funding was continued for a half century—until it was drastically cut. Although this $17.5 million may be budget noise to legislators, it is critical to continue the development of new treatments and



Alexander J. McEwan, MD

procedures in the field and to develop new paradigms of planning and implementing new treatment strategies. At the forefront of this issue from the beginning, SNM initiated intense legislative and grassroots efforts. SNM members and staff kept this issue alive and top of mind with select legislators through discussions and visits and articles submitted and published in the opinions/editorials section of newspapers in key legislative districts. The society also sponsored a full-page, full-color ad in *Roll Call*, an influential Capitol Hill publication. "Congress: Don't turn your back on future discoveries. Support DOE funding for nuclear medicine research," urged SNM in the ad. Many thanks go to you for calling, writing, and visiting legislators.

In December, SNM weighed in on the importance of a readily available domestic supply of medical radioisotopes when medical treatments were being delayed or deferred because of an extended and unannounced shutdown of a Canadian reactor at Chalk River, Ontario, that produces 60% of the world's supply of ^{99}Mo. The shutdown renewed decades-old calls for the United States to develop its own medical isotope reactors rather than continuing to rely on imported products from a limited number of producers. When interviewed by reporters from major newspaper, television, and radio outlets in the United States and Canada, I drove home SNM's point that the United States should not be reliant on a single supplier, a situation that has already caused our patients to suffer through delayed or canceled procedures.

Last year, the NAS concluded that DOE funding cuts would destabilize U.S. leadership in nuclear medicine and would compromise America's ability to develop and produce new diagnostic tests and lead the future of personalized medicine. The NAS report—the culmination of a 13-month investigation by a multidisciplinary team of nuclear medicine experts—stated that expanded use of nuclear medicine techniques could potentially facilitate the implementation of personalized medicine and, in so doing, could accelerate, simplify, and reduce the cost of delivering and improving health care. The report called for a significant enhancement of the federal commitment to the nuclear medicine community through reinstating support for basic nuclear medicine research in DOE. It recommended that regulatory requirements—for toxicology and current good manufacturing practices facilities—be clarified and simplified; noted that domestic medical radionuclide production should be improved; suggested that DOE and the National Institutes of Health (NIH) consider convening expert panels to identify critical national needs for training nuclear medicine scientists; and encouraged interdisciplinary collaboration, an area in which nuclear medicine has long excelled.

We continue to work with SNMTS to get the CARE bill passed to establish education and certification standards for technologists, sonographers, therapists, and physicists across the country. The society continues its outreach to Capitol Hill, increasing dialogue with government and regulatory officers to provide guidelines for the development and use of current and new radiopharmaceuticals and for our role in therapeutic drug development. SNM collaborates with physicians, technologists, and scientists in related associations, including the National Coalition for Cancer Research, the American Society of Clinical Oncology, the American Society for Therapeutic Radiation and Oncology, and the American Association of Physicists in Medicine. An SNM task force monitors and responds to issues related to practice standards, including pay for performance, and continues to work with the American Medical Association to influence a gradual pay-for-performance strategy that will improve health care.

SNM is acutely aware of the issues around PET utilization and reimbursement. Members of its Government Relations Committee are working aggressively with representatives of other organizations to address this issue. In addition to reimbursement issues, SNM is working on broader issues such as regulations surrounding the introduction of PET tracers and the development of an evidence base that is accepted by our colleagues to facilitate increased utilization and reimbursement for our procedures. SNM is working with the National Cancer Institute (NCI) imaging program to establish guidelines and evidence that the nuclear medicine community is generating valid studies to support using SPECT, PET, and hybrid imaging technology for a variety of diseases. This will not only promote the adoption of the technology for patient care but also will create stronger data to support Food and Drug Administration (FDA) approval and requests for reimbursement to the Centers for Medicare & Medicaid Services (CMS) and/or third-party payers.

SNM worked to combat deep cuts in medical imaging services for Medicare beneficiaries as part of the federal Deficit Reduction Omnibus Reconciliation Act, working alongside other societies in the Access to Medical Imaging Coalition. We continued efforts on coding and reimbursement issues and commented to CMS regarding the 2007 rules for the Hospital Outpatient Prospective Payment System and the Medicare Physician Fee Schedule. We participate in discussions about evolving FDA guidelines for the review and approval of radiopharmaceuticals; interact more with industry representatives to promote therapeutic drug development, the use of novel molecular therapeutics, and the development of new diagnostics; and continue our role with the National Oncologic PET Registry.

SNM is addressing the technological, regulatory, financial, business development, and evidence-based requirements to successfully integrate molecular imaging into medical care and the evolving field of personalized medicine by proving that it makes a difference to our patients. SNM is examining strategies for validating molecular imaging methodologies, working with representatives from NCI, the National Institute of Standards and Technology, and NIH to develop meaningful results and data so that these new imaging tests can be introduced as quickly as possible into clinical practice—and also to ensure that current PET indications can be expanded.

With our Molecular Imaging Center of Excellence, SNM is taking an active role in moving emerging molecular imaging probes from bench to bedside, providing our members with a new generation of imaging investigations with which to help our patients and clinical colleagues.

All these successes are the result of the dedicated support and hard work of our physician, technologist, and scientist leaders. I am grateful to all for their dedication and support of SNM and look forward to many future successes. I also want to take the opportunity to thank our many corporate partners for their continued support and advice. I would like to express my thanks to the SNM staff for their tireless efforts to make the society the best it can be and for their dedicated work on your behalf.

Alexander J. McEwan, MD
President, SNM

Our Future Takes Shape

Health-related concerns top the list of promises many of us make to ourselves with each new calendar year—and it's no different with SNMTS. To remain strong and healthy, the Technologist Section has made the following resolutions for the new year and beyond.

SNMTS will continue to advocate for the Consistency, Accuracy, Responsibility, and Excellence (CARE) in Medical Imaging and Radiation Therapy legislation. Mark-up of the Senate version (S.1042) by the Committee on Heath, Education, Labor, and Pensions has been delayed. The CARE legislation would require personnel performing the technical components of medical imaging and radiation therapy to meet federal education and credentialing standards in order to participate in federal health programs. Passage of the bill would result in enhanced patient safety and a higher quality of medical imaging and radiation therapy services. Last fall, Technologist Section members joined more than 750,000 health care workers from 20 related organizations in a virtual march on Capitol Hill to urge its passage. Many thanks to all who called, wrote, or visited legislators about CARE and in requesting that Department of Energy (DOE) funding be restored for basic nuclear medicine research. At the end of last year, approximately $17.5 million for basic nuclear medicine research was included in a federal appropriations package for the DOE Office of Science for 2008. Members of our Advocacy Committee champion these and other issues, including CT licensure issues and the USP 797 regulation that governs a wide range of pharmacy policies and procedures.

The educational curriculum for nuclear medicine technologists must be enhanced. The nuclear medicine technologist educational model—as well as professional and preprofessional curriculum—have undergone very little change over the past 30 years. Technologists will need to be competent in PET/CT and SPECT/CT fusion imaging in the very near future, in PET/MR within a few years, and in radioimmunotherapy as research and protocols develop. These areas of practice will demand the addition of targeted areas of cellular science that are not currently part of the professional applied curriculum. For these reasons, SNMTS supports a bachelor's degree for entry into the field by 2015.

David Gilmore, MS, CNMT, NCT, RT(R)(N)

We have approved a professional entry-level curriculum outline as the educational foundation for individuals entering the field of nuclear medicine technology. Because this is a complicated issue, we are examining different types of models and working with representatives of 2-year and certificate programs to advance this effort. SNMTS will increase outreach efforts, creating presentations to use at chapter and local meetings to discuss the new curriculum and entry-level education.

Members of our Advanced Practice Task Force were given the go-ahead to collaborate and investigate the creation of a new middle-level provider of nuclear medicine services with representatives of the American Registry of Radiologic Technologists, the American Society of Radiologic Technologists, and the Nuclear Medicine Technology Certification Board. The final competencies and curriculum will be approved this year, paving the way for colleges and universities to start the master's program for advanced practice. If all goes well, we expect that the first advanced-practice class could be offered this fall.

Collaboration remains a top priority as SNMTS leaders forge new international relations with members of the European Association of Nuclear Medicine and the World Federation of Nuclear Medicine and Biology. SNMTS will continue to cultivate new leaders by hosting its annual Leadership Academy. The first academy, held this past fall, brought together bright technologist professionals—chosen for their effort and dedication to SNMTS—to participate in a seminar that focused on team development, communications, decision making, and conflict resolution. A task force was formed to decide the future of the academy, including the application and selection criteria for future attendees. By restructuring our governing bodies—and with our Executive Board holding monthly conference calls—we are able to tackle action items much more efficiently.