

top residents, colleagues, or other young professionals to attend. The vitality and health of our field depends on our ability to translate findings into new clinical applications that can benefit our patients.

Together, we can develop a cadre of researchers—both young and old—whose work—whether in the lab or in the

clinic—will unlock tomorrow's mysteries and continue to propel molecular imaging and therapy into the future.

*Robert W. Atcher, PhD, MBA
President, SNM*

From the SNMTS President

It seems as though each year goes a little more quickly than the last, and 2008 was no exception. Last year was a true testament for what is in store for SNMTS—exciting new initiatives that are breaking the mold for the nuclear medicine technologist.

Our most notable and promising accomplishments in 2008 were in the area of education. The position and title of nuclear medicine advanced associate (NMAA) were approved by the SNM Board of Directors, opening the door for the first NMAA program. The first program—a consortium between the University of Arkansas, St. Louis University, and the University of Missouri, Columbia—received final approval from the Arkansas Department of Education in November 2008, with the first class beginning in fall 2009. This program will enable highly capable and motivated professionals to achieve advanced degrees and increase their clinical responsibilities. In addition to the NMAA, we have developed a new, more comprehensive bachelor of science entry-level curriculum to ensure that those beginning their education in nuclear medicine are better prepared. The new curriculum now includes CT, MR, and molecular imaging modalities.

The SNMTS Executive Board adopted the SNMTS Continuing Education Strategic Plan during its 2008 spring meeting. This plan will help to ensure that SNMTS is leading the industry in providing much-needed education material for the technologist. Also introduced in 2008 were the educational resources and board reviews necessary for preparing for the PET and nuclear cardiology certification exams.

After much anticipation, in spring 2008 the SNMTS and the Nuclear Medicine Technology Certification Board (NMTCB) launched Verification of Involvement in Continuing Education (VOICE) credit sharing. An e-mail blast was sent to all SNMTS members announcing this new member benefit. Those who sign up must know their NMTCB number and SNM member number. By signing up, the SNMTS will transmit continuing education credit data directly to the NMTCB, ensuring that credit is reported accurately and on time. The SNMTS will work with the American Registry of Radiologic Technologists over the next year to develop a similar program.

Over the past 2 y, SNMTS has strengthened its international relationships. For the 2008 Annual Meeting, we

extended the SNMTS member rates to technologist members of the European Association of Nuclear Medicine (EANM). This member extension rate will continue for SNM's 2009 Mid-Winter and Annual meetings. SNMTS will extend its member rate to all Canadian Association of Medical Radiation Technologists (CAMRT) members beginning in June 2009.



**Mark Wallenmeyer,
MBA, CNMT, RT(N)**

The SNMTS leadership also traveled to the South African Society of Nuclear Medicine (SASN) and EANM meetings. The leadership have received invitations to and will be attending the 2009 British Society of Nuclear Medicine (BSNM) and CAMRT meetings. At SNM's upcoming annual meeting in Toronto, Canada, June 13–17, we will be hosting an international session for technologists—a panel discussion addressing challenges from around the world, such as regulatory issues and educational models. Representatives from EANM, CAMRT, SASNM, BSNM, and the Australian/New Zealand Society of Nuclear Medicine have been invited to attend and participate in the discussion. The continued collaboration with our sister international organizations will help the nuclear medicine community worldwide.

The SNMTS Advocacy Committee has been working diligently to ensure passage of the consistency, accuracy, responsibility, and excellence (CARE) legislation. Although it has been met with some success, we were disappointed that the U.S. Senate Committee on Health, Education, Labor, and Pensions neglected to include a critical section enforcing credentialing standards. Another huge success was the restoration of \$17.5 million to the Department of Energy Basic Nuclear Medicine Research Fund, down from a budget of \$34 million prior to 2006, but still a large jump from previous discussion. We will continue to press for sufficient funding to ensure that the United States remains the leader in nuclear medicine research and therapy. SNMTS's State Health Policy Liaisons have been renamed "Key Advocates," because they will work to increase community action on legislative issues related to molecular imaging through advocacy assignments, e-mail updates, and other activities. More recently, SNMTS has been working at the grassroots

level to address training issues and inconsistencies. SNMITS will be discussing this issue at its National Council meeting in June in hopes of having some good discussion from chapter delegates regarding issues in their states.

The 2008 RT in DC advocacy event was a huge success, with more than 15 SNMITS members in attendance. In 2009, as the new president, senators, and delegates take office, we feel it is especially important to educate legislators on the challenges and successes faced by the nuclear medicine technologist community. RT in DC this year has been scheduled for April 20 and 21; SNMITS hopes to bring in more than 25 technologist members to meet with various state legislators. SNMITS will be collaborating with the American Society of Radiologic Technologists over the next several months on this effort.

Over the past 2 y, SNMITS has identified many up-and-coming new leaders in our organization through the new SNMITS/IBA Leadership Academy. The Leadership Academy has created an opportunity for our current SNMITS leaders to meet emerging leaders and work with them throughout a 2-d skill-building event. SNMITS has “graduated” 2 classes from the academy and looks forward to graduating a third next year. Applications will open in mid-February for the 3rd Annual SNMITS/IBA Leadership Academy. In addition, beginning at

the Annual Meeting in Toronto, the Leadership Academy will have an annual reunion of all prior graduates. This reunion will allow graduates to continue the networking they started at the academy. Graduates should look for the announcement or invitation.

We are now in the second year of the SNMITS 5-y strategic plan. Over the next year, SNMITS President-Elect Cybil Nielsen will be chairing a strategic planning task force that will review the current strategic plan and develop it to better plan for the future of SNMITS. The task force will meet on February 5, during the SNM Mid-Winter Meeting, to begin creating new strategic goals. We invite all interested SNMITS members to attend the National Council of Representatives (NCOR) meeting on February 6, at which the task force will share the draft strategic goals and request feedback from NCOR attendees.

This is an exciting time for SNMITS, as we work to create the design for the future of the nuclear medicine technologist. We are ready for what the future holds—I just hope its ready for us! It's been a year to celebrate!

Mark Wallenmeyer, MBA, CNMT, RT(N)
SNMITS President

State of the Science of Molecular Imaging: 2008

This has been an exciting year for molecular imaging science, with the primary theme for the year being “multimodality.” It is apparent that all of the imaging modalities we have at our disposal are crucial to the future of our field. The use of more than 1 of these modalities, either simultaneously or in tandem, has become commonplace, with developments in new combination instrumentation coming at a rapid pace. For example, while PET/CT is now the gold standard for clinical molecular imaging, PET/MR has come into its own this year. The research groups of Bernd Pichler, PhD, and Simon Cherry, PhD, published several papers on this subject in 2008, with papers on this topic in *The Journal of Nuclear Medicine* (1–2) and a high-profile paper published in *Nature Medicine* describing a 3-dimensional small animal PET scanner built into a 7T MR imaging unit (3). The prospects for combining functional MR imaging and/or MR spectroscopy with PET are particularly exciting, as this new technology will combine 2 functional/molecular imaging modalities into a single instrument (4).

Advances in neuroimaging have brought new insights into the brain's “default network,” a specific, anatomically defined brain system preferentially active when individuals are not focused on the external environment (see the review

by Buckner et al. [5] for an elegant treatise on this subject). The default network is active when we are engaged in what we might think of as “doing nothing” or when we are allowed to think unrestrained and undisturbed. The default network has relevance for understanding mental disorders including autism, schizophrenia, and Alzheimer's disease (AD). For example, emerging evidence suggests that activity in the default network augments a metabolic cascade that is conducive to the development of AD, because pathology of this disease appears in the default network even before symptoms emerge. The preferential use of the default network throughout life may be conducive to increased accumulation of the plaques and tangles that cause the dementia of AD. Metabolic PET and functional MR imaging have contributed greatly to the understanding of these important discoveries. The take-home message from this amazing research is to try not to let our minds wander, but to be more focused and disciplined throughout our lives!

In the area of cardiovascular imaging, recent progress has been made in multimodality imaging of atherosclerotic



Carolyn J. Anderson, PhD