

The 2022 Year in Review

The History Committee is charged with maintaining and compiling the history of the Technologist Section. With this charge, one of the items that the committee would like to begin and continue is this brief Year in Review.

Coming out of the pandemic, SNMMI hosted the Mid-Winter Meeting virtually, but the Annual Meeting was held using the first completely hybrid format in SNMMI's history (with the meeting being held both in-person in Vancouver, BC, and also virtually). The meeting was well attended, with many new sessions and topics being presented. Most importantly, colleagues came together for the first time since June 2019, the last in-person Annual Meeting. For those attending, it truly felt like a homecoming. In addition, SNMMI completed the year with the 2nd Theranostics Meeting, hosted at the Gaylord National Resort & Convention Center in Maryland. The introduction of this new hybrid-meeting format for SNMMI came with great interest and excitement for those unable to attend meetings every year.

The SNMMI Technologist Section was led by President Dusty M. York, CNMT, PET, RT(N)(CT), through the 2022 Annual Meeting with the new president, Krystle W. Glasgow, CNMT, NMTCB(CT), NMAA, assuming office at the end of the Annual Meeting in Vancouver. Dmitry D. Beyder, MPA, CNMT, was elected as President-elect.

The post-pandemic world had everyone moving and acting trepidatiously. In 2022, SNMMI continued to provide guidance regarding COVID-19 vaccines, and the Technologist Section supplemented the recommendations with articles on the benefits and experiences individuals had following vaccination, published in the *Journal of Nuclear Medicine Technology (JNMT)*.

SNMMI hosted the Artificial Intelligence and Barriers to Patient Access Summit in March—the first of its kind for the Society—designed to bring together thought leaders to discuss current obstacles in the field of nuclear medicine and provide solutions.

Mid-year, SNMMI announced the creation of the Mars Shot Fund, an initiative to raise \$100 million to help pay for nuclear medicine, molecular imaging, and therapy research. Applications for the first \$1 million were opened in December, producing an overwhelming amount of interest.

SNMMI approved the following statement: Safe and Equitable Healthcare for All: SNMMI's Position on the Doctor-Patient Relationship—"SNMMI believes that physicians must be able to provide safe, effective, and accessible evidence-based health care to patients without the threat of non-medical outside interference. We condemn any interference with the doctor-patient relationship outside of public health measures and acknowledge that such interference

can disproportionately impact historically and economically marginalized and disadvantaged populations. Physicians, legislators, regulators, and patients must work together to ensure safe and equitable health care for all."

The issue that hospitals are now facing is not the decreased number of hospital beds but the personnel shortages. This phenomenon is one that the entire world and almost all industries are grappling with as businesses fight to stay open and staffed. The workforce shortage poses a huge problem for healthcare—specifically, the nuclear medicine and molecular imaging community—creating the perfect storm. Nuclear medicine technologist programs and residencies are closing while more and more therapies are being approved. The field is booming and in desperate need of qualified individuals. The SNMMI and industry have partnered to tackle this issue through the Value Initiative Workforce Pipeline Domain and have identified several outreach strategies that will debut in 2023. The Technologist Section created a one-of-a-kind recruitment video showcasing the amazing careers, stability, and growth possibility as a Nuclear Medicine Technologist.

In March 2022, SNMMI named Stanford Health Care and the Dana-Farber Brigham Cancer Center as its first two designated Radiopharmaceutical Therapy Centers of Excellence. SNMMI created the Radiopharmaceutical Therapy Center of Excellence program to certify sites that meet strict regulatory, training, qualification, experience, and performance criteria for radiopharmaceutical therapy. With the Radiopharmaceutical Therapy Centers of Excellence designation, institutions can assure patients, their families, referring physicians, and payors that rigorous procedures are in place and followed, ultimately leading to appropriate patient selection and optimal outcomes from radiopharmaceutical therapy.

The Food and Drug Administration announced the approval of several new therapies and agents, including game-changing nuclear medicine treatment for metastatic prostate cancer, shown to reduce risk of death by 38% and risk of progression by 60% in metastatic castration-resistant prostate cancer patients. Technology and science in our field seemed to have exploded in 2022. The journals are jam-packed with new isotopes, instrumentation, techniques, and findings. The *JNMT* and its editor have expanded the journal, with so much information and new material, and to quote the editor, "Theranostics: The Future is NOW!" The Technologist Section also released a new book: *Artificial Intelligence in Nuclear Medicine*—the FIRST AI book from the SNMMI. The nuclear medicine and molecular imaging community also celebrated many new advances in science and technology over the past year, including (1):

- Novel PET Agent Effectively Detects Multiple Cancers, Identifies Patients for Targeted Therapies
- PET/MRI Machine Learning Model Can Eliminate Sentinel Lymph Node Biopsy in Majority of Breast Cancer Patients
- Novel PET Imaging Agent Detects Earliest Signs of Alzheimer's Disease
- Ultra-Low Dose Total Body PET/CT Effective for Evaluating Arthritis
- New PET Tracer Shows Promise for uPAR-Targeted Therapy of Neuroendocrine Neoplasms
- New Research Shows PSMA PET/CT Imaging Changes Management for Close to 50 Percent of Prostate Cancer Patients
- Revolutionary Technology Shortens Cardiac Scan Time, Provides High-Quality SPECT Images
- Novel Radiopharmaceutical Pair Detects and Treats Melanoma; Study Shows Potential for Broad Application in Solid Tumors
- Virtual CT Scans Cut Patient Radiation Exposure in Half During PET/CT Studies
- PET Imaging Confirms Link Between Obstructive Sleep Apnea and Heart Blood Flow Impairment
- Novel PET Agent Highly Effective for Imaging Meningiomas; Offers Logistical Advantages Over Standard Agents
- Novel Ultra-Low Dose PET Technique Significantly Reduces Radiation Exposure
- Novel Deep Learning Method Provides Early and Accurate Differential Diagnosis for Parkinsonian Diseases
- New Radionuclide Combination Therapy Safe and Effective in Metastatic Prostate Cancer Patients
- Molecular Imaging Uncovers Effects of COVID-19 on the Brain
- Novel Radioligand Therapy Proven Superior for Metastatic Prostate Cancer Patients
- PSMA PET Validates EAU Classification System to Determine Risk of Prostate Cancer Recurrence
- PET/CT Artificial Intelligence Model Ideal for Predicting Risk of Future Heart Attack

Both the SNMMI and the SNMMI-TS hosted Strategic Planning sessions in 2022, the first in more than 5 years due to the COVID-19 pandemic. For the first time in decades, it was agreed that there would be one mission and vision that directed the entire organization. The Technologist Section, who created their own mission and vision to focus on the technologist specifically, agreed that it was essential to have one cohesive mission and vision statement to ensure synergy moving forward.

The end of the year proved difficult as nuclear medicine reported a shortage of molybdenum-99 (Mo-99)/technetium-99m (Tc-99m) through and beyond the third week of November. More than 20 million Americans benefit each year from nuclear medicine procedures used to diagnose and treat a wide variety of diseases such as Alzheimer's, certain cancers, and heart disease. Any delay in the supply chain impacts patient care by preventing access to the most up-to-date treatments, imaging, and diagnostic tests. As we progress from 2022 into 2023, physicians are asking our technology if certain disease states may be seen and/or treated. The answer should be the title of Dr. Simon Cherry's 2022 Cassen Award presentation, "It's Just a Matter of Time."

The history of the SNMMI and SNMMI-TS is rich. The membership and leadership have contributed and continue to contribute greatly. But as one looks at history, one of its major contributing components is its technologists who propagate the technology on the front lines. Let us keep moving forward as we remember our past.

REFERENCE

1. SNMMI NEWS & PUBLICATIONS, NEWS AND MEDIA, SNMMI NEWS. <http://www.snmmi.org/NewsPublications/NewsList.aspx?metadadataid=34&navItemNumber=676>.