

A Banner Year for Nuclear Medicine, Molecular Imaging, and Theranostics

Cathy Sue Cutler, PhD, FSNMMI, SNMMI President

Over the past year, there has been unparalleled growth in the field of nuclear medicine, molecular imaging, and theranostics, and SNMMI has been hard at work to ensure that innovation continues to flourish. SNMMI spearheaded many important projects to support the field, including funding basic research, providing education, and increasing access to imaging and therapy. I am happy to report that SNMMI exceeded its goals on all fronts in 2024!

Below are highlights of the society's work over the past 6 months, as well as new and ongoing initiatives.

Advocacy. SNMMI recently celebrated a landmark victory for patients and care providers as the Centers for Medicare & Medicaid Services (CMS) announced a significant adjustment to the Hospital Outpatient Prospective Payment System. CMS will unpackage and pay separately for diagnostic radiopharmaceuticals with per-day costs exceeding \$630, removing financial barriers that have long hindered patient access to essential nuclear medicine diagnostic procedures.

The CMS policy update marks the culmination of SNMMI's persistent efforts over many years, which included submitting numerous letters to CMS, coordinating meetings with congressional representatives, organizing grassroots advocacy efforts and Hill Days, and issuing repeated calls to action. This success also effectively removes the need for legislative action under the FIND Act, for which SNMMI members and supporters had strongly advocated in recent years.

SNMMI marked another advocacy win regarding dedicated research for neuroendocrine tumors. The society worked with several congressional offices to include neuroendocrine tumors as an approved and allowable research area under the Congressionally Directed Medical Research Program Peer-Reviewed Cancer Research Program. It was included in the Senate Department of Defense Appropriations bill. Once Congress passes a budget and signs the bill into law, the provision will be finalized.

The Society continues to work to prevent detrimental changes to the Nuclear Regulatory Commission (NRC) guidance on patient release. The proposed guidance would have changed the occupancy factor from 0.25 to 1.0, which SNMMI believes is overly restrictive. SNMMI submitted comments to the NRC in support of keeping the occupancy rate at 0.25 to maintain patients' access to critical care while continuing to protect public health and safety; in response to those comments, NRC is revising its proposed guidance. At the November 4 meeting of the Advisory Committee on the Medical Uses of Isotopes (ACMUI), NRC staff announced that the revised draft will be provided to the ACMUI for their review and comment.

SNMMI continues to keep very close tabs on the supply of critical nuclear medicine isotopes. Most recently, the community is navigating a supply shortage of $^{99}\text{Mo}/^{99\text{m}}\text{Tc}$ due to a delay in the restart of the high-flux reactor in Petten, Netherlands. The Society sent a letter to the regulatory agency in South Africa to encourage them to increase

production and kept its members abreast of the situation with news updates.

Currently, SNMMI is working to prevent potential budget cuts to the National Institutes of Health (NIH). The House Energy and Commerce Committee may pursue significant reforms for the NIH, which may lead to budget cuts. SNMMI joined the Academy for Radiology & Biomedical Imaging Research (ARBIR) and other medical imaging associations to support NIH's work and continued funding to NIH's base budget. The groups urged the House committee to involve stakeholders in their discussions to ensure scientific research remains a priority. SNMMI representatives Jason Lewis and Richard Wahl have been appointed to an ARBIR committee to work on this issue.

Meetings and Education. SNMMI's 2024 Annual Meeting went above and beyond on all accounts. The meeting surpassed goals for registration, with more than 8,000 nuclear medicine professionals in attendance. It also featured a sold-out exhibit hall of more than 220 companies, the biggest in SNMMI Annual Meeting history. As such, the Annual Meeting was also a financial success. Planning is now in full swing for the 2025 SNMMI Annual Meeting, which will be held June 21–24 in New Orleans, Louisiana. The theme of next year's meeting is "Accelerating the Cure," and it promises to be an exciting meeting.

Advances in theranostics took center stage at SNMMI's 2024 Therapeutics Conference. Held in September, the conference included 8 distinct sessions covering advances in radiopharmaceutical therapies. More than 300 nuclear medicine clinicians, researchers, technologists, regulators, and suppliers attended the conference, making it the largest Therapeutics Conference to date. The 2025 Therapeutics Conference will take place November 5–8 in Bethesda, Maryland.

Registration is now open for the 2025 SNMMI Mid-Winter & ACNM Annual Meeting, which will be held January 30–February 1 in Anaheim, California. The meeting program will feature 3 educational tracks: ACNM Annual Meeting, General Nuclear Medicine, and Cardiovascular (Specialty Track). The meeting also features an extensive table-top exhibit and networking events.

Research and Discovery. The SNMMI Mars Shot Research Fund, which aims to revolutionize the future of patient care through groundbreaking scientific discoveries, has raised nearly \$4.2 million in gifts and pledges since its inception. Nine grants have been awarded



Cathy Sue Cutler, PhD, FSNMMI

to academic researchers to date: one \$1 million grant, four \$500,000 grants, and four \$100,000 grants.

SNMMI's Clinical Trials Network and Centers for Molecular Imaging Innovation and Translation hosted a 1-day workshop on "Streamlining Collaborations: Study Startups" in September immediately prior to the Therapeutics Conference. The goal of the workshop was to decrease the time it takes to get a trial initiated at a clinical site. More than 160 people registered for the inaugural workshop; presentations from the workshop are available online.

The Therapy Clinical Trials Network is also moving forward in its mission to establish a network of highly qualified clinical trial sites with substantial radiopharmaceutical therapy and imaging expertise and infrastructure to support phase 0–3 targeted radiopharmaceutical therapy clinical trials. Eight pilot sites are developing the infrastructure and standard operating procedures, and a new database is under development to collect data on the sites' imaging and therapy capabilities. All SPECT/CT scanners at the sites have been calibrated with ^{177}Lu , and standardized trial budgeting tools have been created.

The Dosimetry Challenge also continues its progress. The SNMMI Dosimetry Task Force completed 5 ^{177}Lu Dosimetry Challenge papers and is drafting a final recommendation manuscript on ways to standardize the steps of the dosimetry process, based on results from the challenge.

In early 2025, a "Future of Nuclear Medicine and Radiopharmaceutical Therapy" summit will unite key stakeholders—scientists, health care providers, industry leaders, and regulators—to address the evolving landscape of nuclear medicine. Attendees will explore current challenges, discuss emerging opportunities, and chart a collaborative path forward, focusing on innovation, patient care, and advancements in radiopharmaceutical therapy that support precision medicine.

Usage of SNMMI's flagship journal, *JNM*, has surged, nearly doubling over the past year—likely fueled by rising interest in nuclear medicine advancements, theranostics, and expanding clinical applications. The new *JNM* monthly podcast series has garnered over 8,500 views on YouTube, with episodes available in both video and audio formats on the *JNM* website at jnm.snmjournals.org/page/podcasts. Subscribe to stay updated on the latest in nuclear medicine!

Workforce Pipeline. SNMMI is actively expanding pathways for professionals to enter the field of nuclear medicine. Through its Jobs of Tomorrow docuseries, SNMMI highlights the evolving landscape of nuclear medicine and therapy, presenting high-quality, engaging content to a wide audience via platforms like Apple TV and Tubi. This 6-part series drives interest and builds awareness about careers in nuclear medicine. For additional resources on career opportunities, visit SNMMI's Career Page and share it with students and residents.

SNMMI has established a dedicated steering committee to address the unique needs of Advanced Practice Providers (APPs) and Nurse Practitioners (NPs) in the field of nuclear medicine. This committee aims to create pathways for these professionals to join SNMMI, offering them access to specialized continuing education and resources tailored to their roles. By fostering a supportive community and professional development opportunities for APPs and NPs, SNMMI is broadening the reach and inclusivity of its membership.

In addition, the SNMMI Future Leaders Academy, scheduled for January 29, 2025, during the SNMMI Mid-Winter & ACNM Annual Meeting, serves as a vital platform for engaging and developing emerging talent. Together, these initiatives underscore SNMMI's commitment to supporting and nurturing the next generation of nuclear medicine professionals, ensuring a vibrant future for the field.

Quality. SNMMI's Radiopharmaceutical Therapy Centers of Excellence now include 93 designated sites, with 44 comprehensive centers, 24 clinical, and 25 registered centers. This designation,

which identifies sites that attest that they meet strict regulatory, training, qualification, experience, and performance criteria, ensures reliable access for patients requiring radiopharmaceutical therapy and theranostics.

The Radiopharmaceutical Therapy Registry (RaPTR) and RaPTR Plus are live, with image data for Lutathera and clinical data for 170 Pluvicto and Lutathera patients now available. A thyroid cancer module is also being added to RaPTR's REDCap database. Pilot sites are testing a new REDCap feature that integrates EPIC, enabling automated data transfer and reducing manual entry.

SNMMI's Board of Directors approved 8 new guidance documents this year. These guidelines cover nuclear medicine protocols, including fibroblast activation protein–targeted PET, radionuclide therapy for neuroendocrine tumors, PET imaging for brain metastases, gastrointestinal bleeding scintigraphy, meningioma theranostics, ^{18}F -FDG PET for brain, infection and inflammation studies, and pediatric radiopharmaceutical dosing.

The Emission Tomography Standardization Initiative (ETSI) brings together experts to modernize PET imaging through a standardized data format, fostering PET innovation, harmonization, and artificial intelligence applications. Following last year's awareness-building hackathon, a second hackathon was held on November 3–4, 2024, in Tampa, Florida, led by the Physics, Instrumentation, and Data Sciences Council with SNMMI support. This event aimed to educate, expand ETSI's user base, and gather feedback to advance nuclear medicine and molecular imaging.

Collaboration and Communication. SNMMI has achieved significant success this year in collaborations with patient advocacy and physician groups. The society engaged 14 patients and caregivers to participate in its annual Hill Day event, where patients shared their personal experiences with elected officials and urged support for SNMMI-backed initiatives. Additionally, SNMMI and its Patient Advocacy Advisory Board hosted a highly impactful Patient Education Day alongside the Annual Meeting. This event, organized in collaboration with the Canadian Association of Nuclear Medicine, Prostate Cancer Support Toronto, and Canada NETS, welcomed 52 in-person attendees and has since garnered more than 1,400 online views.

To enhance outreach to referring physicians, SNMMI participated in numerous physician conferences throughout the year, including the Infectious Diseases Society of America Annual Meeting, the NANETS Symposium, and the American Association for Geriatric Psychiatry Annual Meeting. The society also has held several "roadshow" events nationwide, broadening awareness and education about nuclear medicine across diverse medical communities.

In early 2024, SNMMI launched an ambitious social media initiative focused on boosting engagement and "stopping the scroll" with eye-catching design, interactive posts, a professional yet friendly tone, and compelling short-form videos. The results have been outstanding: SNMMI's follower growth is now significantly outpacing the industry average, with Instagram clicks up by more than 400% and LinkedIn clicks more than doubling. During the Annual Meeting, SNMMI's social media channels saw nearly 200,000 views, more than 25,000 engagements, and more than 1,000 new followers! Join the conversation—follow @SNM_MI on social media and share in the excitement.

As we look ahead to 2025, SNMMI is poised for continued progress and innovation. The Board of Directors convened in early October to explore strategies that will drive our field forward, and I am pleased to announce that we approved a robust budget for the upcoming fiscal year. On behalf of the Board, I want to extend my heartfelt gratitude to the supporters of SNMMI's Value Initiative. Your ongoing commitment is instrumental in advancing patient care and enhancing our profession. Here's to a successful year ahead!