

Journey to the Other Side of the World

Norman E. Bolus, MSPH, MPH, CNMT, FSNMMI-TS

In the past 4 months, my responsibilities as SNMMI-TS president have led me to three interesting and productive meetings.

European Association of Nuclear Medicine (EANM)

In continued support of the EANM Technologist Committee, I attended the annual EANM meeting in October in Dusseldorf, Germany, with our international liaison, David Gilmore, EdD, CNMT, FSNMMI-TS.

The SNMMI Technologist Section (SNMMI-TS) has supported many EANM endeavors over the last several years and has written chapters for their technologist guide book series—most recently for their Prostate Cancer Imaging and Therapy book. Daniel Tempesta, BS, CNMT, RT(N)(CT), and David Gilmore co-wrote the chapter on PET/CT procedures with fluorine-18 radiopharmaceuticals in prostate cancer, and David gave a lecture at the meeting on this topic.

Overall, this meeting was informative and educational. I was fascinated to learn how much the EANM Technologist Committee had accomplished over the last several years; I respect their continued efforts. After the EANM it was on to Seoul, Korea, for the next meeting.

Korean Society of Nuclear Medicine

At the June 2017 SNMMI Annual Meeting in Denver, CO, the president of the Korean Society of Nuclear Medicine (KSNMT), Hong-Jae Lee, invited the president of the SNMMI-TS to the 59th annual KSNMT meeting in October 2018, which was held jointly with the 8th annual meeting of the Asia Society of Nuclear Medicine Technology in Seoul, South Korea. As SNMMI-TS has committed to increasing its international endeavors and contacts, I attended to represent the Section and presented a lecture at the meeting.

To maximize my experience, I asked to visit hospitals and students in Korea, and during the 7-day trip I was able to

visit 5 major hospitals in and around Seoul and give a lecture to 100 students at Shingu College. It was a grueling schedule, but one I was happy to undertake. The city of Seoul has a population of some 10.3 million people—a little larger than New York City. Four of the five hospitals I visited were 1,100–1,300 bed size hospitals with nuclear medicine departments and cyclotron facilities: Seoul National University Hospital, Severance Hospital in Seoul, Samsung Seoul Medical Center, and Seoul National University Bundang Hospital. The fifth and largest hospital was Asan Medical Center, also located in Seoul, which is the largest hospital in South Korea with some 2,300 beds. I was fascinated to learn that Asan Medical Center was made possible by the Asan Foundation, which was set up by Chung Ju-Yung, the founder of Hyundai Groups of South Korea, with 50% of the company's original stock. Many hospitals all across South Korea as well as other philanthropic endeavors have been supported by this foundation.

As I toured the hospitals, I was very impressed by their infrastructure. Three of the five hospitals had PET/MR, and most are associated with an active cyclotron facility. Most facilities had a mix of camera systems—a good range of old and new. I was shocked to discover that each of these five hospitals averages 100–150 bone scans per day and employs some 35 technologists. One PET Center performed 11,000 PET/CT scans and 2,000 PET/MR procedures in 2017—approximately 30 PET/CT scans per day including weekends—and all the hospitals have the capacity to do even more. Overall, the city of Seoul has some 20 PET/CT units. The volumes, types of studies done, setup of the nuclear medicine departments, and overall organization showed



Norman E. Bolus, MSPH, MPH, CNMT, FSNMMI-TS



Left: Fifteen nuclear medicine students from 100 radiology students at Shingu College, with Professor Hoon-Hee Park, Norman Bolus, and Paul Bolus in middle of group. Right: Hong-Jae Lee, Norman Bolus, and Hui-Soon Jang at the Seoul National University Hospital.

me that, in some respects, the nuclear medicine facilities were better equipped than those in the United States and certainly performed more procedures. South Korea does have a national healthcare system, which factors into the volumes, and the wait time for elective medical procedures is 3–4 months. I also learned the highest-incidence cancers for South Koreans are stomach and colon cancer, which they attribute to eating massive amounts of kimchi (a fermented hot cabbage dish), which is served at every meal.

One of Hong-Jae Lee's goals is to unite all technologists worldwide. He has been successful in doing this in the Asia societies and wants to expand his success globally. I support this endeavor and hope that the SNMMI-TS can establish a Global Initiative with this in mind. Our profession is small, and any cooperative endeavor worldwide would give us a better political voice worldwide.

SNMMI Midwinter Meeting

The 2019 SNMMI Midwinter Meeting was held in Palm Springs, CA, on January 17–19. Prior to the meeting I participated, along with SNMMI-TS President-Elect Mark H. Crosthwaite, MEd, CNMT, PET, NMTCB(RS), FSNMMI-TS, in the 12th annual SNMMI-TS Leadership Academy. The Leadership Academy has had great success in fostering personal leadership skills for members and student members, and a number of past participants have chosen to become involved in the SNMMI-TS at the national, chapter, and local levels. This year's participants included Paige Beeman, RT(N), PET; Christopher Blanton, MBA, CNMT/RS, RT(MR); Mark H. Crosthwaite, MEd, CNMT, PET, NMTCB(RS), FSNMMI-TS; Mario Di Dea, MS, RT(N); Raynold Ho; Jessica Mendicino (student); Rani Noble (student); Ashley Pasker (student); Angela Plunkett, CNMT; Justin Saner, CNMT; Debra Silberberg; and Chloe Wendorf, MHA, CNMT, PET, CT.

At the National Council of Representatives (NCOR) meeting on January 18, we heard from many different groups that are important to the profession, including the American Registry of Radiologic Technologists, the American Society of Radiologic Technologists (ASRT), the Education and Research Foundation, the Joint Review Committee on Educational Programs in Nuclear Medicine Technology, and the Nuclear Medicine Technology Certification Board. We also heard many committee updates on ongoing endeavors associated with our strategic plan.

At the NCOR meeting, several important issues were discussed that needed a quick response. The first was proposed changes to the ASRT Practice Standards. SNMMI-TS prepared and submitted comments concerning ASRT's Procedure Standards for Imaging. The overview noted that SNMMI recognizes the efforts of ASRT to streamline and consolidate the existing practice standards into one comprehensive document; however, the society has concerns

with the proposed document as currently written. SNMMI believes the proposed Practice Standards for Medical Imaging and Radiation Therapy (1/4/19) are ambiguous, unclear, and fall short on providing the information and supporting evidence required to protect the public health, safety, and welfare of citizens of the United States. Additionally, the document is incomplete and lacks the information necessary for a state or national government to support and protect the practice of nuclear medicine technology. In sum, SNMMI does not support this document as currently written, and the ASRT should consider adopting many, if not all, of the sections of SNMMI's 2018 Nuclear Medicine Scope of Practice and Performance Standards as well as our 2018 Model Practice Act for Nuclear Medicine Technology.

The other issue concerned a request for comment from the Nuclear Regulatory Commission (NRC) on whether it should establish tailored training and experience requirements for different categories of radiopharmaceuticals for which a written directive is required. The input NRC collects will be used to determine whether significant regulatory changes to the NRC's training and experience requirements for authorized users (AUs) are warranted. At the request of the NCOR, SNMMI added a paragraph to its response: "The Society includes a Technologist Section, comprised of 11,000 professional nuclear medicine technologists. Under the supervision of the Authorized User technologists mix, prepare and administer imaging and therapeutic radiopharmaceuticals and operate and monitor equipment to trace the movement and concentration of these radiopharmaceuticals in the body. Nuclear medicine technologists are integral in delivering high quality patient care in hospitals, universities, medical clinics and research centers across the United States and abroad. They are particularly essential in the delivery of radiopharmaceutical therapy by providing radiation safety education and protection to the patient during and after the therapy administration. They administer the therapy dose under the personalized supervision of the AU. Their unique training and education provide a necessary component in treating patients and assuring a successful clinical outcome."

These are just two examples of issues that the SNMMI and SNMMI-TS continue to monitor to help protect our profession. It was discussed that many nuclear medicine technologists do not understand that their membership in SNMMI and SNMMI-TS helps protect our profession in ways that are not often readily recognized or understood. Member dues support programing, educational activities, journals, advocacy efforts, and more. Without continued and growing membership, we cannot do the many things we do to help our profession. I ask everyone to help by encouraging your peers in the profession to join or maintain membership in SNMMI or SNMMI-TS.