Susan C. Weiss, BS, CNMT, 1944–2009

Susan C. Weiss (née Anderson), BS, CNMT, died on Sunday, July 19, 2009, from pancreatic cancer. "Sue," as she preferred to be called, was born on June 14, 1944. Her career in nuclear medicine spanned 44 productive years. To list the highlights of her career would not do justice to the person that she was, and there is not enough space even to simply publish her curriculum vitae (CV). The quality of her life goes well beyond her professional CV.

A PIONEER

To begin, Sue was a pioneer in the subspecialty of pediatric nuclear medicine (PNM). Webster's dictionary defines a pioneer as "a person who goes before, preparing the way for others, as an early settler or a scientist doing exploratory work."

After training in nuclear medicine technology (NMT) at the University of Minnesota with Merle Loken, and after brief stays in Manchester, Connecticut, and in Philadelphia at the Albert Einstein Medical Center, Sue migrated to Chicago, where she began as a staff technologist at the Children's Memorial Hospital (CMH). In 1967, CMH had acquired the first Anger gamma camera to be installed in a pediatric hospital. She readily adapted the adult equipment and techniques to the requirements of the child. Within three years, she became the chief nuclear medicine technologist, a post that she held for 21 years. During her first years at CMH. Sue went to night school and earned her Bachelor of Science degree from Roosevelt University in Chicago.

AN INNOVATOR

As an innovator, Sue was instrumental in the development of numerous nuclear medicine techniques for use in children. One of her first publications was a booklet on pediatric techniques



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that was handed out at a central chapter meeting. The methods of sedation and handling of children for nuclear medicine procedures were developed and published, including an award-winning scientific exhibit. Sue helped to perfect the technique of direct radionuclide cystography that has been adopted throughout the world. She participated in the first prospective pediatric dosimetry determinations for 99mTc-mercaptoacetyltriglycine. Numerous other adaptations included pinhole dacryocystography imaging in infants using a custom-made 1-mm pinhole collimator insert; thallium SPECT of the heart in Kawasaki disease; the early use and promotion of 99mTc-glucoheptonate for the diagnosis of pyelonephritis in infants; elucidation of the mechanism for Legg-Calvé-Perthes disease and a nuclear medicine staging protocol that accurately predicts the outcome of the disease even in its earliest stages; the documentation of asymmetric pulmonary perfusion in D-transposition of the great vessels in newborn infants, leading to earlier heart surgery to preserve lung perfusion; and portable brain scintigraphic angiography to determine brain death 100% of the time. Sue helped to develop and validate microtechniques in radioimmunoassay using minute blood specimens from newborn infants. These were just a few of the types of research studies in which she participated.

In fact, Sue published 21 scientific abstracts and 20 scientific papers in prestigious pediatric, radiology, nuclear medicine, and orthopedic journals and had 15 scientific exhibits to her credit during the technology phase of her career. These scientific exhibits garnered two gold medals, one silver medal, and one bronze medal from the SNM, as well as many honorable mentions. The scientific exhibits were also presented to numerous other scientific assemblies such as at the Radiological Society of North America (RSNA), the American Medical Association, the Society for Pediatric Radiology, the Society of Uroradiology, and the American Academy of Orthopedics, to promote the use of radioisotopes in children and to teach other professionals the benefits of developing the science of nuclear medicine. Sue adopted the philosophy of publishing PNM articles in journals on specialties other than nuclear medicine to further the use of radioisotopes in children.

In 1974, Sue received the Best Paper Award from the *Journal of Nuclear Medicine Technology*, and from 1989 to 1994, she served as the editor of that journal.

In 1978, Sue applied to the Nuclear Regulatory Commission to become, perhaps, the first practicing NMT to be certified as a radiation safety officer, thus opening another career route for technologists. She performed that service admirably for the next 17 years at CMH, to the economic benefit of the hospital, and that expertise eventually led to her posttechnology career as an independent consultant in the field of radiation safety.

(Continued on page 10A)

(Continued from page 8A)

A VOLUNTEER

As a volunteer, Sue was always the first to say, "OK, I'll do it." For many years. Sue was the first in line for the regular blood donation drives at the hospital. She often said it was for the cookie and the orange juice. The first SPECT brain scintigram was performed on Sue, and we chided her about what she would do if the scintigram did not show anything. We learned from her experience that SPECT imaging in those days was not a simple task for children, because of the long imaging times. That led her to develop improved immobilization devices for use in children. We worked with industry representatives on many projects to adapt their equipment to all sizes and weights of children.

A MENTOR

As a mentor, Sue monitored, coached, and taught NMT students from Triton and DuPage Colleges. In addition, nuclear medicine physician residents from Northwestern University Medical School, the Hines VA Hospital, the Cook County Hospital, and the United States Armed Forces Nuclear Medicine training programs all received PNM training at CMH. Technologists and physicians came to Chicago on training scholarships from their home countries in Canada, Japan, Germany, Chile, Belgium, Turkey, Kuwait, and Australia and spent time with Sue learning the wherewithal of dealing with pediatric patients. The International Atomic Energy Agency sponsored international physician trainees to come to CMH. Countless physician resident trainees from radiology, urology, pediatrics, orthopedics, and other disciplines who also rotated through CMH benefited from her knowledge and wisdom. In addition, numerous already-practicing nuclear medicine physicians, scientists, and technologists came to Chicago to learn our techniques. It is no wonder that Sue was recognized as an international star in nuclear medicine.

Over the 21 years that Sue was chief technologist at CMH, there must have been nearly 1,000 NMT students who received PNM training. Each and every student was personally interviewed and evaluated by her at the conclusion of their training. She sat on the educational boards of Triton and DuPage Colleges from their inception and for many years assisted them in creating their educational curriculums in NMT.

Sue served on the Joint Review Committee on Educational Programs in Nuclear Medicine Technology (JRCNMT) for 20 years or more, and she evaluated dozens of technologist training programs for their accreditation, the most recent less than a year ago. Her philosophy was to not just find faults with the programs but to assist with bettering the programs for students.

A TEACHER

As a teacher, Sue presented lectures-more than 100 of them-all over the world, including in Japan, where she helped set up a technologist association, and at the meetings of the World Federation of Nuclear Medicine and Biology in Montreal, Canada; Sydney, Australia; Berlin, Germany; and Santiago. Chile, where she was instrumental in formulating the PNM educational tracts. A little-known fact is that she independently raised \$10,000 for airfare to send other NMTs to the Berlin meeting of the World Federation of Nuclear Medicine and Biology to present papers. Another littleknown fact is that she often donated the honoraria from her lectures to the Paul Cole fund of the Education and Research Foundation (ERF) of the SNM.

Sue and I often presented lectures as a team. The technologist section of the Greater New York chapter hosted us at least 15 times over the years and honored us with lifetime memberships. Sue would present the technologic aspects of the studies, and I would present the clinical value of the studies. We were often referred to as a "dog and pony show." Sue always told me what part of the show was mine. Duffy Price, CNMT, once said in an e-mail to me that Sue and I were the "dream team of nuclear medicine."

AN ORGANIZER

As an organizer, Sue excelled in extrapolating a need into a functionality. A prime example was the reorganization of the ERF into a cooperative alliance between the ERF, the SNM, and the SNM technologist section. Sue and other members of a task force developed a concept to create a cooperative alliance whose governance and representation was shared and coordinated to provide a win-win situation for all three independent organizations. Sue presented this concept to the board of directors of the ERF-SNM, and after many summit meetings, a strategic alliance was stamped out to the benefit of nuclear medicine. The ERF-SNM now contributes more than a quarter million dollars each year for education and research in nuclear medicine.

A LEADER

Perhaps Sue's greatest role was as a leader. I have often said that ten persons in a hundred will get involved in one way or the other in the activities of an association and only one in a hundred will become the association's leader. Sue was that one in a hundred. Sue excelled in leadership. Sue broke traditional barriers for women and especially for technologists. She was the first woman to be elected as a president of the SNM technologist section. Sue was the first woman and technologist to be elected as a president of the ERF-SNM, and she eventually became its executive director. Sue was the first woman and technologist to be elected as a president of the central chapter, the largest chapter of the SNM, and she served on its board of directors for 24 years. Sue even served as the scientific program chair for a chapter meeting. She represented the central chapter at the June 2009 meeting of the SNM house of delegates when she was exhausted from chemotherapy and her cancer. Sue had an absolute sense of (Continued on page 12A)

(Continued from page 10A)

obligation and commitment to her profession. She served numerous terms on the SNM board of trustees and the later house of delegates. She served on numerous committees and the national council of the SNM technologist section.

Sue was a founding member of the nuclear medicine technology certification board and she worked with other NMT pioneers in creating a valid certification process for NMT. We experienced many an adventure as we learned the tedious process of creating, from scratch, a valid certification examination for nuclear medicine technologists.

Sue was chosen to serve as the coordinator of the Associated Sciences Consortium by the RSNA. She planned the yearly educational themes and developed the daylong educational programs for each RSNA annual meeting for several years.

The technologist section elected her to represent NMT at the constitutional convention of the National Commission for Health Certifying Agencies (NCHCA), and she was elected as the speaker of the NCHCA general assembly in 1981 and was an executive council member of that organization from 1981 to 1984. Who better to represent NMT at that embryonic time for the NCHCA?

Essentially, Sue was instrumental in establishing NMT as a recognized medical profession. I have often said that the vibrancy of the field of nuclear medicine has been the unique working relationships between physicians, technologists, scientists, and industry representatives. I am not aware of any other medical association that has technologists and scientists who sit on their boards of directors and executive committees and are instrumental in operating and managing the association's affairs. Sue's primary professional goal was to ensure that the relationships between the various groups continued to foster and grow.

One of Sue's most admirable traits was her unwillingness to hold a grudge. Sue just could not hold a grudge against anyone, and she had the wisdom and confidence to work with and accept the position of those who challenged her prior efforts or position. Sue had the talent of being able to compromise and work together with her opposition to achieve the best win–win results for all.

The citation of accomplishments is the easy task in a memorial presentation. One need only look at the person's CV and cite those accomplishments. I reviewed Sue's CV a month before the June meeting. Her CV lacked several accomplishments such as her work for the JRCNMT. I asked her why she did not list them, and she said, "I feel that listing everything is like bragging and I prefer not to do that."

To portray the individual as a person is much more difficult. As a close friend and colleague of 38 years. I perhaps spent more awake time with Sue in those years than I did with my wife. We often drove to and from work together. We were the first to arrive at the hospital and the last to leave after we had taken care of every child or emergency. We mentored each other and edited each other's manuscripts. As a consequence, I seldom ever had a manuscript returned for editing. Of course, we did not always agree on issues, but that never affected our mutual respect for one another.

Sue was very thoughtful and considerate. She would shop the year around for the perfect gift to give to her friends on their birthdays and at Christmas time. Our families shared holiday dinners together. Sue loved cooking, and she amassed a fine collection of used and rare cookbooks with an emphasis on her Swedish heritage. At the SNM meetings, our spare time was often spent rummaging through old used bookstores. Our mutual interest in fine dining and fine wines led to the founding of the Nuclear Oenophile Club of the SNM, which just celebrated its 37th annual dinner in Toronto, Canada. Sue and I attended each of the dinners and often served as the Senior Oenophile Boss (the SOB), a term coined by Craig Harris to indicate the person who is responsible for organizing the dinner. The club's motto was again coined by Craig Harris, "I ain't mad at nobody," and is usually proclaimed at the end of each dinner by the participants.

Sue loved Audubon bird prints and had collected several original largefolio prints, which she treasured. She also played golf whenever she could. I golfed with her several times, and she played a decent game. Sue originated an annual golf outing when she was chair of the Associates and Technical Affiliates of the Chicagoland area, otherwise known as ATACA-a mouthful to be sure, but it was instrumental in the early years of nuclear medicine in Chicago. The monthly educational meetings were shared with industrial representatives, technologists, scientists, students, and physicians. The few profits that were generated from the golf outings were used to sustain ATACA and its educational meetings.

Sue loved her cats, especially a oneeyed black monster that had lost an eye to an automobile, and her latest cat, "Fonzi," who was named after The Fonz of television fame. (Sue often made up nicknames for her nuclear medicine colleagues as well.) Fonzi tolerated "Ruffy," Sue's purebred border terrier. Dolores and I babysat Ruffy during a Weiss vacation when he was a puppy, and he tore up our home. Sue babysat with our three children when Dolores and I traveled to Taiwan for a meeting. We were always mutually there for each other when help was needed.

Words cannot describe Sue as a person. She was foremost a family person who cherished her Swedish heritage and family in Minnesota. She loved her summer cottage in Forest Lake, Minnesota, which was built by her carpenter father, who died early in Sue's life. She talked about him frequently. Sue was caring, fun-loving, compassionate, fiercely loyal, considerate, dedicated, thoughtful, smart, and competent-an innovative leader and a trustworthy person. Her accomplishments for nuclear medicine and especially NMT will not be replicated. We will miss Sue, and we will remember her always as a great friend and colleague.

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