



IN MEMORIAM

Henry N. Wagner, Jr., MD 1927–2012

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Henry N. Wagner, Jr., MD, a pioneer in nuclear medicine and international leader in the field for more than half a century, died on September 25 at his Baltimore home. Wagner retired from his career-spanning professorship at Johns Hopkins Hospital (Baltimore, MD) in 1995 but remained active in his emeritus status as a vigorous contributor to the nuclear medicine community. His achievements, which were recognized by numerous awards and honors, included not only basic and clinical science “firsts” but a distinguished record of publication, presentation, education, and outreach. “For 56 years, Henry Wagner was a towering figure in nuclear medicine, radiology, and public health at Hopkins—and around the world,” said radiologist Richard L. Wahl, MD, who holds the Henry N. Wagner Jr., professorship in nuclear medicine at Hopkins. “His unique ability to look back at the history of our field, to synthesize current trends, and to predict future directions was an extraordinary gift from which all of us in the global nuclear medicine community benefited.”

Wagner was born and grew up in Baltimore. After service during World War II at the U.S. Coast Guard Academy (New London, CT), he received his undergraduate and medical degrees from Johns Hopkins. Service in the U.S. Air Force Reserve was followed by residency at Hopkins, which he completed in 1959, after also holding a clinical associate position at the National Institutes of Health (Bethesda, MD) and a fellowship at Hammersmith Hospital (London, UK). He remained at Hopkins throughout his career, becoming a full professor of radiology in 1967, of medicine in 1970, and of environmental health sciences in 1976. From 1964 to 1973 he served as physician-in-charge of the Hopkins Nuclear Medicine Division and from 1972 to 1976 as the acting chair of the Department of Radiological Sciences. He was also the director of the Division of Radiation Health Sciences in the department from its founding in 1976. He received honorary doctorates from Washington College (Chestertown, MD), the Universitatis Georgine Augustae (Göttingen, Germany), and the Universiteit Brussel (Belgium).

Wagner initially worked with John G. McAfee, MD, at Hopkins in the 1950s on studies with a range of early radiolabeled agents and scanning devices. In 1962 and 1963 they published pioneering studies on the use of ^{203}Hg -chlormerodrin for renal imaging. In 1963 they also first used radiolabeled albumin aggregates for imaging lung perfusion in healthy individuals and patients with pulmonary embolism. Five years later Wagner and colleagues built on previous work to publish groundbreaking studies on the use of ^{133}Xe ventilation scans to diagnose pulmonary embolism. Wagner is perhaps most widely known for his early contributions to PET imaging, having served in 1983 as the first human test subject for PET imaging of dopamine and opiate receptors in the brain. The images acquired in these experiments are widely acknowledged to have influenced a new generation of research into the brain's physiology and pathophysiology. His work also advanced diagnosis and understanding in cardiology. In addition to the wide focus of his investigations, he served as a durable and reliable advocate for nuclear medicine on the larger scientific stage, writing numerous state-of-the-art reviews for publications such as *The Journal of the American Medical Association* and *the New England Journal of Medicine*.

Wagner trained more than 500 radiologists, internists, nuclear medicine physicians, and scientists, many of whom went on to become leaders in the field and 8 of whom (thus far) have served as SNM presidents. His list of publications includes more than 800 peer-reviewed articles, 122 book chapters, more than 20 books and monographs, and a volume of scientific and personal memoirs, *A Personal History of Nuclear Medicine* (2006). He was president of the American Federation for Clinical Research (1953), SNM (1970–1971), the World Federation of Nuclear Medicine and Biology (1975–1978), and the Johns Hopkins and Baltimore City Medical Societies (1978–1980). He served on numerous advisory and editorial boards, including national and international government consultancy positions. His lifetime achievement was recognized by (among many awards) the Hevesy awards of both the European Association of Nuclear Medicine (1976) and SNM (1985), the first Vikram Surhabel gold medal awarded by the Society of Nuclear Medicine of India (1972), the American Medical Association’s Scientific Achievement Award (1991), and the first annual SNM President’s Award for Outstanding Contributions to Nuclear Medicine (1993). He also founded what is today the SNMMI Wagner–Torizuka Fellowship, which provides dedicated training to Japanese physicians in early stages of their careers. A separate named lectureship now honors Dr. Wagner’s many contributions and was presented at the 2012 Annual Meeting by Kirk Frey, MD, PhD. In his many roles as leader, investigator, counselor, and mentor, Wagner embraced innovation and encouraged independent thinking. In his memoirs, he advised young readers with an interest in science: “Do not think as you are told, and do not do as others do according to the rules.” His own creative and independent adherence to these maxims helped to define the development of nuclear medicine from its earliest years through its 21st-century transition to molecular medicine.

Wagner is survived by his wife of 61 years, Anne Barrett Wagner, 4 children, and 9 grandchildren. A private funeral was held in September, with a scientific community celebration of his life on November 3 at Hopkins.