

Welch Elected to the Institute of Medicine

Michael J. Welch, PhD, of Washington University School of Medicine in St. Louis, has been elected to the Institute of Medicine. He was selected because of his professional achievements and interest in issues that affect public health. Welch, a professor of radiology, chemistry and biomedical engineering, codirects the Division of Radiological Sciences at the medical school's Mallinckrodt Institute of Radiology. He is also a professor of molecular biology and pharmacology.

Only a handful of exceptional physicians and scientists are named to the IOM. Within the field of nuclear medicine, past IOM inductees include S. James Adelstein, MD, PhD, Michael Phelps, PhD, Michel Ter-Pogossian, PhD, Henry Wagner, MD, and Alfred Wolf, PhD. Widely viewed as the most prestigious U.S. medical institution, the Institute of Medicine was established by Congress in 1946 as part of the National Academy of Sciences, which advises the federal government on science and technology.

"Short of the Lasker or Nobel prizes, election to the IOM is the highest honor a U.S. physician may receive. In a real sense it also, secondarily, recognizes the physician's field, making Dr. Welch's election important to nuclear medicine as a whole," said Richard Reba, MD, Department of Radiology, University of Chicago.

Among his other accomplishments, Welch is

known for his development of rapid methods to synthesize positron-labeled organic chemicals, a vital step in making positron emission tomography (PET) a useful medical tool. In the late 1980s, Welch's laboratory and collaborators at the University of Illinois at Urbana-Champaign demonstrated that PET scans using radiolabeled estrogen could locate human receptors for the hormone. Welch subsequently helped demonstrate that PET studies with radiolabeled compounds provide a rapid and sensitive way to study biological processes in the nervous system and elsewhere. His efforts also helped PET gain acceptance as a valuable tool for detecting breast and other cancers and for making therapeutic choices. In addition, he recently received funding from the National Cancer Institute to develop new imaging agents and to establish a national resource for medical researchers that perform imaging studies.

Welch's honors include awards from the American Chemical Society and SNM, of which he was president in 1984. He joined the faculty at Washington University School of Medicine in 1967 as an assistant professor of radiation chemistry. He trained previously as a chemist at the University of London, England, and at Brookhaven National Laboratory in Upton, New York. Welch received bachelor's and master's degrees from Cambridge University and a doctorate from the University of London in 1965.