

# How I Became Interested in Nuclear Medicine

**Dominique Delbeke, MD, PhD** - *Professor and Past-Director of Nuclear Medicine and PET, Department of Radiology and Radiological Sciences Vanderbilt University Medical Center, Lifetime Board Member, ABNM*

I started my career in Nuclear Medicine when I moved to Vanderbilt University Medical Center in 1986. My path to Nuclear Medicine was not straight forward, as I had no previous training in the field and had only limited exposure to Radiology and Nuclear Medicine during medical school, my post-doctorate work and residency.

I completed Medical School at the Free University of Brussels followed by a 4-year residency in Clinical Pathology at the same University. As a medical student, I was participating in research on the mechanisms of regulations of thyroid hormones secretions in a research laboratory associated with the Medical School. My mentor and Director of the laboratory, Jacques-Emile Dumont suggested that I specialized in Clinical Pathology because of my research experience with laboratory techniques and radioimmunoassay. I moved to the United States in 1982 for family reasons and did research as a Postdoctoral Associate in the Pharmacology Department at Yale University for 2 years before passing the USLME exams and completing my residency in both Clinical and Anatomical Pathology.

My move to Nashville and Vanderbilt was late in the year and there were no openings in Pathology upon my arrival. I was fortunate to be introduced to Martin Sandler, Director of Nuclear Medicine, and he offered me a residency position in Nuclear Medicine. I was later hired as a staff physician in Nuclear Medicine and benefited from working with great mentors. I became actively involved in resident training in Nuclear Medicine and was promoted to full Professor at Vanderbilt Medical School. I subsequently founded the PET Center at Vanderbilt and was promoted to Director

of Nuclear Medicine at Vanderbilt when Martin Sandler was elevated to Vice Chancellor of the Medical School. During this time, I also became actively involved in the Society of Nuclear Medicine and was elected President of the Society and later served as Editor of The Journal of Nuclear Medicine. I also served as a director of the American Board of Nuclear Medicine.

I enjoyed the change from Pathology to Nuclear Medicine because of the interactions with the patients, being exposed to the complex physiology and pathophysiology of the body, and being able to treat patients. The field of Theranostics continues to expand, providing increased opportunities for Nuclear Medicine physicians to expand their practice with field imaging and treating patients with the same radiopharmaceutical labeled by different isotopes. In addition, Nuclear Medicine utilizes SPECT and PET radiopharmaceuticals for additional diagnostic opportunities.

In the United States, Nuclear Medicine is a section of Radiology in many institutions, whereas in Europe and other continents, Nuclear Medicine is a totally independent specialty. The American Board of Radiology considers Nuclear Radiology a subspecialty of Radiology; however, it is one of the 24 Boards recognized by the American Board of Specialties. In addition, there is the related field of Nuclear Cardiology which is included in the residency training of Nuclear Medicine. It is a subspecialty of Cardiology with different levels of certifications according to the length of training.