NUCLEAR MEDICINE
THE BASICS

What is Nuclear Medicine?
Nuclear Medicine is a medical specialty that uses the tracer principle, most often with radiopharmaceuticals, to evaluate molecular, metabolic, physiologic and pathologic conditions of the body for the purposes of diagnosis, therapy and research.

What is the difference between Diagnostic Radiology and Nuclear Radiology?
Nuclear Radiology is a subspecialty of Diagnostic Radiology that uses the administration of trace amounts of radioactive substances (radionuclides) to provide images and information for making a diagnosis.

What is the difference between Nuclear Medicine and Nuclear Radiology?
Nuclear Medicine and Nuclear Radiology are similar fields with different emphasis. Nuclear Medicine has a greater emphasis on cardiology, therapy, and research. Nuclear Radiology has a greater emphasis on cross-sectional imaging including CT and MR.

How can I discover more about the field?
While nuclear medicine is an exciting, growing field with new imaging and therapeutic procedures, many people graduate from medical school and residency without a clear understanding of what nuclear medicine is and how they can engage with nuclear medicine departments to better serve their patients. Shadowing physicians in a nuclear medicine department is valuable first step in discovering the field. While a nuclear medicine rotation may not be in the curriculum of your medical school, rotations can generally be set up with the radiology department deepening your understanding of the specialty. Other resources could include your local radiology interest group, a visit to a commercial radiopharmacy, or a research project.

How will I begin a career in Nuclear Medicine?
There are several pathways to a career in nuclear medicine. Dual radiology and nuclear medicine residency pathways are gaining popularity with multiple new programs created over the past few years. You should discuss the pros and cons of the various pathways with an advisor and consider using the resources below to further explore the options.

Learn more: nmcareers.snmmi.org