Nuclear medicine combines computer technology, advanced medical instrumentation, radiation physics and patient care to diagnose and treat disease.

Nuclear medicine is an imaging modality that provides unique information about both the structure and function of virtually every major organ system within the body.

Nuclear medicine is different from x-ray, CT, MRI and sonography.

It is this ability to characterize and quantify physiologic function at the molecular level, that separates nuclear medicine from other imaging modalities.

Nuclear medicine procedures are safe; they involve little or no patient discomfort and generally do not require the use of anesthesia.

Want More Information?
Call your local hospital and ask for the nuclear medicine department or contact a local nuclear medicine technology program. Speak directly with a nuclear medicine technologist or program director and arrange for a visit.

For information about Nuclear Medicine Technology programs, contact:
Joint Review Committee on Educational Programs in Nuclear Medicine Technology
2000 W. Danforth Road
Suite 130, #203
Edmond, OK
Tel 405.285.0546 • Fax 405.285.0579
Email: jrcnmt@coxinet.net
Website: www.jrcnmt.org

For additional information about the profession, write or call:
SNMTS
1850 Samuel Morse Drive, Reston, VA 20190-5316
Tel 703.708.9000 • Fax 703.708.9015
E-mail: education@snm.org
Website: www.snm.org

Nuclear Medicine Technology Certification Board
2970 Clairmont Road, Suite 935
Atlanta, GA 30329
Tel 404.315.1739 • Fax 404.315.6502
E-mail: board@nmtcb.org
Website: www.nmtcb.org

The American Registry of Radiologic Technologists®
1255 Northland Drive
St. Paul, Minnesota 55120-1155 USA
Tel 651.687.0048
Website: www.arrt.org

Or contact your guidance counselor or local library for:
The Allied Health Education Directory
The Technologist’s Role

The nuclear medicine technologist is a highly specialized healthcare professional who works closely with the nuclear medicine physician. Some of the technologist’s primary responsibilities are to:

- Prepare and administer radioactive chemical compounds, known as radiopharmaceuticals
- Perform patient imaging procedures using sophisticated radiation-detecting instrumentation
- Process data and enhance digital images using advanced computer technology
- Provide images, data analysis, and patient information to the physician for diagnostic interpretation
- Evaluate new procedures for appropriateness in specific clinical settings and patient populations

Direct Patient Care

During an imaging or therapy procedure, the technologist works directly with the patient. The technologist:

- Gains the patient’s confidence by obtaining pertinent history, describing the procedure and answering any questions
- Monitors the patient’s physical condition during the course of the procedure
- Notes any specific patient comments which might indicate the need for additional images or might be useful to the physician in interpreting the results of the procedure
- Works independently to apply complex information and knowledge to maximize individual patient diagnostics

A Variety of Opportunities

Nuclear medicine technologists work in a wide variety of clinical settings, including:

- community hospitals
- teaching hospitals and medical centers
- outpatient imaging facilities
- physician offices
- public health institutions
- government and private research institutes.

Salary

Salaries tend to vary with geographic region and cost of living. For entry-level salary information in your region, contact your accredited Nuclear Medicine Technology educational program.

Career Alternatives

Technologists have a wide variety of alternative career paths available, including but not limited to:

- Senior staff technologist
- Research technologist
- Education-program director, clinical coordinator, professor, or instructor
- Chief technologist
- Departmental administrator
- Hospital administrator
- Industry sales representative, technical specialist, or research-and-development specialist
- Information technology (IT) manager
- Radiation safety officer
- Government regulator

Educational Programs

More than 100 accredited nuclear medicine technology programs currently offer instruction and clinical internship. General pre-requisites depend on the type of program offered, but typically include a strong foundation in science and mathematics combined with an interest in working with patients. Available programs include one-year certificate, two-year associate degree and four-year bachelor's degree.

Certification

Upon successful completion of an accredited nuclear medicine technology program, qualified technologists can become certified through examination by the Nuclear Medicine Technology Certification Board or the American Registry of Radiological Technologists. Many employers and an increasing number of states now require certification or licensure. This professional requirement will expand career choices for the future.

An Exciting Future!

Nuclear medicine will continue to be a field at the forefront of modern clinical medicine and technological development. The future has never been brighter thanks to:

- The development of new radiopharmaceuticals for diagnosis and therapy
- Research and development of cancer-detecting and cancer-killing agents, such as genetically-engineered, radioactive antibodies
- The expanding clinical use of exciting technology known as Molecular Imaging which provides new and unique means of studying biochemistry and metabolism within living tissues
- The advancement of fusion imaging to correlate physiological and anatomical patient information.