

Nuclear Medicine Technologist



Occupational Description

Nuclear medicine is the medical specialty that uses the nuclear properties of radioactive and stable nuclides to make diagnostic evaluations of the anatomic or physiologic conditions of the body and to provide therapy with unsealed radioactive sources. The skills of the nuclear medicine technologist complement those of the nuclear medicine physician and of other professionals in the field.



Job Description

Nuclear medicine technologists perform a number of tasks in the areas of patient care, technical skills, and administration. When caring for patients, they acquire adequate knowledge of the patients' medical histories to understand and relate to their illnesses and pending diagnostic procedures for therapy, instruct patients before and during procedures, evaluate the satisfactory preparation of patients before commencing a procedure, and recognize emergency patient conditions and initiate life-saving first aid when appropriate.

Nuclear medicine technologists apply their knowledge of radiation physics and safety regulations to limit radiation exposure, prepare and administer radiopharmaceuticals, use radiation detection devices and other kinds of laboratory equipment that measure the quantity and distribution of radionuclides deposited in the patient or in a patient specimen, perform in vivo and in vitro diagnostic procedures, use quality control techniques as part of a quality assurance program covering all procedures and products in the laboratory, and participate in research activities.

Administrative functions may include supervising other nuclear medicine technologists, students, laboratory assistants, and other personnel; participating in procuring supplies and equipment; documenting laboratory operations; participating in departmental inspections conducted by various licensing, regulatory, and accrediting agencies; and participating in scheduling patient examinations.



Employment Characteristics

The employment outlook in nuclear medicine technology is good. Opportunities may be found in major medical centers, smaller hospitals, and independent imaging centers. Opportunities also are available for obtaining positions in clinical research, education, and administration. Salaries vary depending on the employer and geographic location. According to a 2001 survey of 14,754 nuclear medicine technologists by the Nuclear Medicine Technologist Certification Board, the average entry-level salary is \$46,480.



Educational Programs

Length. The professional portion of the programs is 1 year. Institutions offering accredited programs may provide an integrated educational sequence leading to an associate or baccalaureate degree over a period of 2 or 4 years. **Prerequisites.** Applicants for admission must have graduated from high school or the equivalent and have acquired postsecondary competencies in human anatomy and physiology, physics, mathematics, medical terminology, oral and written communications, chemistry, and medical ethics.

Curriculum. The curriculum includes patient care, nuclear physics, instrumentation and statistics, health physics, biochemistry, immunology, radiopharmacology, administration, radiation biology, clinical nuclear medicine, radionuclide therapy, and introduction to computer application.



Inquiries

Careers/Curriculum

American Society of Radiologic Technologists
15000 Central Ave SE
Albuquerque, NM 87123
www.asrt.org

Society of Nuclear Medicine—Technologist Section
1850 Samuel Morse Dr
Reston, VA 22090-5316
703 708-9000

Certification/Registration

Nuclear Medicine Technology Certification Board
2970 Clairmont Rd NE/Ste 610
Atlanta, GA 30329-1634
404 315-1739

American Registry of Radiologic Technologists
1255 Northland Dr
Mendota Heights, MN 55120
www.arryt.org

Program Accreditation

Joint Review Committee on Educational Programs in Nuclear
Medicine Technology (JRCNMT)
PMB 418
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Polson, MT 59860-2107
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