Nuclear Medicine Technology

Director

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Undergraduate major: nuclear medicine technology (BS)

Website: https://radsci.medicine.uiowa.edu/programs/nuclear-medicine-technology

Program Information

The Nuclear Medicine Technology professional program covers theory and techniques in nuclear medicine technology through didactic and clinical coursework. Prospective students typically apply to this two-year program during their sophomore year and begin in fall of their junior year.

Up to eight students are accepted into this two-year professional program each year. Upon completion, graduates are eligible to apply for the national certification exams in nuclear medicine technology through both the American Registry of Radiologic Technologists (ARRT) and the Nuclear Medicine Technology Certification Board (NMTCB). Students will have also completed didactic coursework for the national certification exam in computed tomography (CT).

Nuclear medicine technology is one of two undergraduate majors in the field of medical imaging offered by the Carver College of Medicine; see Radiation Sciences in the catalog.

The Carver College of Medicine is located on the University of Iowa health sciences campus, and is integrated within University of Iowa Health Care, which includes one of the nation's largest university-owned teaching hospitals. For information about the college's academic programs and resources, see Carver College of Medicine in the catalog.

UI Health Care and the Carver College of Medicine have a proud academic tradition of preparing students for successful careers in the radiation sciences. Today, that tradition continues through its strong curriculum, quality clinical experience, and commitment to undergraduate education in the creation of images and treatment of patients using highly sophisticated equipment and techniques.

Career Information

A nuclear medicine technologist is a healthcare professional who specializes in the preparation and administration of radioactive materials for diagnostic imaging and therapeutic procedures. Working as part of a multidisciplinary medical team, they collaborate closely with nuclear medicine physicians, radiologists, medical physicists, and other healthcare providers.

Their primary responsibilities include:

- **Imaging Procedures**: Perform nuclear medicine scans using specialized equipment such as gamma cameras and positron emission tomography (PET) scanners to capture images of organ function and structure.
- **Radiopharmaceutical Preparation and Administration**: Prepare and administer radiopharmaceuticals to patients, ensuring proper dosage and safety protocols are followed.
- **Patient Care**: Monitor patients before, during, and after procedures, providing clear instructions and ensuring comfort and safety throughout the process.
- **Equipment Operation and Quality Control**: Operate and maintain imaging equipment, perform quality control checks, and ensure compliance with safety standards and regulatory guidelines.
- **Data Analysis and Documentation**: Analyze imaging results, assist physicians in interpreting data, and maintain accurate patient records.

Nuclear medicine technologists play a vital role in diagnosing and treating a wide range of conditions, including cancer, heart disease, and neurological disorders. They typically work in hospitals, diagnostic imaging centers, and specialized clinics. With additional education and experience, technologists may advance into roles such as PET/CT specialists, educators, researchers, or administrative and leadership positions.