Nuclear Medicine Technology as a Career in Victoria

**EDUCATION**

The 3 year undergraduate Bachelor of Applied Science (Medical Radiations) - Nuclear Medicine is the only program offered in Victoria.

- **Pre-requisites:**
  Units 1 & 2 - Chemistry or Biology, and
  Units 3 & 4 - a study score > 30 in English (ESL) or > 25 in any other English, and a study score > 20 in Mathematical Methods (CAS) or Specialist Mathematics.

**Up to five scholarships per year may be awarded to students with an ATAR > 85 who enter nuclear medicine at RMIT immediately after completing Year 12. Applicants from outside metropolitan Melbourne may receive a loading of two ATAR points. The scholarships, provided by the Victorian Department of Health, are each worth $10,000 over the three year program.**

- **Subjects studied:**
  You will study nuclear medicine specific subjects, as well as: anatomy and physiology; pathology; digital imaging; radiation dosimetry; imaging anatomy; medical physics and instrumentation; hospital law and ethics; psychology; research methods; CT; ultrasound; MRI; etc.

**GRADUATE TRAINING**

Graduates from RMIT must complete a year of supervised clinical practice, called an internship in Victoria. Candidates apply for an internship in a cluster of three workplaces which offer varying experiences; a training wage is paid. A monthly education program is provided for all interns at St Vincent's Hospital.

**CAREER OPPORTUNITIES**

Practitioners work in public hospitals, private hospitals, or private clinics, in both metropolitan and regional areas. Experienced technologists may have extra responsibilities in areas such as the radiopharmaceutical laboratory, PET/CT scanning, student supervision, quality assurance, management, or research. A qualification in nuclear medicine can also lead to a career in: ultrasound; sales, applications and support; management; academia; IT; public health administration; etc.
Lauren, 30

**How did you become a nuclear medicine technologist?**
When I was in Year 9 I had a nuclear medicine bone scan for a back injury. I was really interested in what was happening. I already knew I wanted to work in healthcare, but I didn’t want to be stuck in a lab because I’m more of a people person.

**What does a nuclear medicine technologist/scientist do?**
Nuclear medicine is a branch of medical radiations, which uses radiopharmaceuticals and high-tech equipment to perform diagnostic tests (mostly imaging) and to treat disease. Nuclear medicine images can be used to diagnose and/or monitor conditions like heart disease, cancer, sports injuries and epilepsy. The use of radiopharmaceuticals to treat or control certain diseases is a small but critical part of nuclear medicine. Nuclear medicine technologists/scientists prepare and administer radiopharmaceuticals, perform studies using machines including gamma cameras and PET scanners, and then process, analyse and display the results, which are reported by a nuclear medicine specialist.

**What sort of skills and qualities do you need?**
You need really good communication and patient care skills because you have to be able to explain the scans to patients. Time management and organisational skills are really important. You also need to be forward-thinking, flexible and a little bit creative because every patient and every procedure is slightly different.

**What are the pros and cons of the job?**
The best part of my job is the people that I work with, like the other technologists, doctors, nurses and our admin team. Nuclear medicine is a really exciting field, with new technology being trialled and introduced all the time. We have the opportunity to be involved in research studies and to attend and present at seminars and conferences. The worst part about my job is a lack of understanding about radiation within other areas of the hospital and in the general public.

**What does a typical day involve?**
In the morning we prepare the radiopharmaceuticals that will be used during the day and perform quality control tests on the equipment. When a patient arrives for their appointment I’ll explain the procedure to them and take their clinical history. I’ll then administer the required radiopharmaceutical, perform the study, and then process the results and display the data for our doctors. There’s a lot of planning ahead involved in each day. It’s often our job to liaise with wards, patients, our doctors and referring doctors.