MAHCP Career Profile

Nuclear Medicine Technologist

Submitted by Shelagh Parken Nuclear Medicine Technologist, HSC

It is always entertaining watching someone's response when we reply to the question "What do you do for a living?" We get anything from the blank look and slack jaw to the "Oooh, you must be smart!" Sure, put "Nuclear" in front of anything and it sounds smart, scary and complicated.

Nuclear Medicine is a discipline that uses very small amounts of unsealed radioactive sources. Sounds scary and complicated but actually it is not. Nuclear Medicine is safe, painless and we do not make our patients glow in the dark!

Nuclear Medicine is mainly an imaging modality but our work involves both therapies and diagnostic testing. The therapies are a small part of our workload but are highly successful for treatment of thyroid cancers, hyperthyroidism and other illnesses. Diagnostic testing is the majority of our work.



Shelagh Parken

We have a few diagnostic *in vitro* tests and a multitude of diagnostic imaging tests. In Nuclear Medicine we image all major organ systems and all parts of the body. Nuclear Medicine imaging also includes Bone Density and PET (Positron Emission Tomography).

In Nuclear Medicine we use various radiopharmaceuticals that are designed to go to specific areas in the body. We use a special camera called a Gamma Camera to image the distribution of these radiopharmaceuticals. It is this distribution that is assessed when interpreting a test. We can quantify and characterize this radiopharmaceutical distribution. This provides information on both function and structure.

A Registered Technologist of Nuclear Medicine (RTNM) has a wide range



Jana Povey, RTNM



Jaylene Ducharme, RTNM and Judy Paterson, PET Clinical Trials Coordinator



Jaylene Ducharme, RTNM

of responsibilities. In some facilities, the RTNM will make the radiopharmaceuticals and perform quality control of the preparations. We administer both the diagnostic and therapeutic radiopharmaceuticals. We do regular quality control on our equipment including our Gamma Cameras. We perform all aspects of our imaging and non-imaging procedures.

Nuclear Medicine Technology is not available for study in Manitoba. We do, however, have an agreement with the Southern Alberta Institute of Technology. We reserve three seats per year. Students may apply to the program directly out of high school. Our students go to Calgary for an academic year and then return home for a year of clinical experience. Nuclear Medicine Technologists are in high demand and Manitoba has a shortage. Financial incentives and Return of Service agreements are available for potential Nuclear Medicine Students.

Nuclear Medicine is a great field to work in. Our technology is constantly changing and improving. This keeps our work interesting as we can continue to learn and develop new skills. We are front line workers that work directly with both inpatients and outpatients. It is a rewarding and satisfying career.



Margaret Kwok, RTNM and Julie Toms, RTNM



Jeff Normandeau, RTNM