Frequently Asked Questions

Specialty/field questions:

1a) What are the best things about your specialty?
The tremendous variety of pathology in medicine which nuclear medicine physicians encounter, coupled with the satisfaction of knowing that our work contributes significantly to the care of a great many patients, are among the best aspects of this specialty. In many cases, nuclear medicine studies such as PET-CT are looked upon as the final, definitive study which will provide the definitive diagnostic and often prognostic answers to a difficult clinical problem. The results of our studies can have profound impact on the subsequent care and management of a patient. In this respect, nuclear medicine is a highly satisfying diagnostic discipline.

1b) What are the worst things about your specialty?
Not an easy question to answer, largely because I don’t think many nuclear medicine physicians spend much time complaining about their choice of career.

2. Why did you choose your specialty?
There are numerous factors which attracted me to nuclear medicine. This includes the dynamic nature of the imaging specialty. I was attracted to the technology that it uses, and I was fascinated by the basic science. Similar to radiology, its importance as a diagnostic imaging service and our role as consultants to other physicians is highly satisfying. I like the fact that patient contact was not only still present in this specialty, it is actually essential in order to perform the job properly.

3. What types of clinical cases do you commonly see?
The exact mixture of cases depends highly on the nature of the department and the makeup called for by its referring clinicians. Generally, nuclear medicine sees cases from the full breadth of clinical medicine, from pediatric endocrinology to adult hematology. The case mix from our specific department reflects the fact that we are in a tertiary care setting, with access to various high end programs such as transplantation, as well as tertiary pediatric care.

4. Briefly describe a typical day.
Very busy! There will be pressure to report a large volume of imaging studies, which is ever increasing in the setting of our growing population. In addition, there will be frequent requests from our clinical colleagues for consultation on difficult clinical cases, regarding imaging workup. Often, there will also be requests from our clinical colleagues to review previously reported studies.

5a. What are the varieties of lifestyle within your field?
The choice of practice will in some ways dictate some of the lifestyle issues commonly associated with medicine. Obviously, the amount of after-hours call has a great impact on a physician’s (and his or her family’s) lifestyle. Hospital practice is always associated with some on call service. The frequency of call depends on the number of practitioners in the group. Because of the nature of most nuclear medicine studies with respect to the availability of radiotracers, their relative cost after-hours, and the time required to complete most procedures, nuclear medicine imaging is not requested in emergency/urgent cases to the same extent seen in several radiology procedures. Nevertheless, there are several clinical scenarios in which specific nuclear medicine procedures are requested on an urgent basis as the diagnostic modality of choice.

5b. Specifically, how able is your specialty to accommodate family life?
Not a problem. This specialty can easily accommodate family life.

6. Range of incomes?
Satisfactory.

7. How do you see your discipline changing over the next decade?
In large part, the changes are technical, driven by the fast pace of technological development. With the explosion of cross fusion modalities such as PET/CT in SPECT/CT, there is now an increasing emphasis on more anatomic precision with respect to our nuclear medicine scans. It is no longer sufficient to describe the functional pathophysiology that traditional nuclear medicine provided. Increasingly, we are now required to precisely localize the site of the pathology with respect to body anatomy. Practically, this means that the modern-day nuclear medicine physician must have the skill set of cross-sectional imaging such as ultrasound, CT, MRI, etc. More than ever, a nuclear medicine physician should ideally have radiology training, as there is an increasing request by referring clinicians to correlate the findings with all other available imaging results.

Residency program questions:

1a) What are you looking for specifically in an impressive candidate?
While not absolutely necessary, a background in mathematics, physics, physiology, and computer skills are very useful skills for this specialty. One of the more challenging aspects of our specialty is the strong emphasis/reliance on basic science knowledge. At the level of the final fellowship examinations, basic science knowledge is the area where weaker candidates may have difficulty.

Because of the nature of nuclear medicine as a consulting imaging specialty, good communication skills are an absolute requirement. Because of the relatively small size of our program and the dependence of our residents on each other during their training, the ability to function as an effective team member is vital.

1b) What can a potential candidate do now in order to be an appealing applicant to your program?
Learn some fundamentals about our specialty. Do some electives with us. Show some interest. The same would probably be said of any other potential candidate for other residency programs.

2. How is your residency program organized?
Because of our philosophy with respect to the nuclear medicine training, our program is intimately associated with the radiology program. Our program trains candidates to become dual certified practitioners in both radiology and nuclear medicine.

After one basic clinical year, all nuclear medicine residents will complete four years of radiology training, which satisfies Royal College requirements for Diagnostic Radiology training. This is followed by two years of core nuclear medicine training. The combination of four years of radiology training followed by two years of nuclear
medicine training satisfies Royal College requirements for nuclear medicine training.

3. What is your program's orientation and focus?
To produce a well-trained, modern nuclear medicine physician with a strong general imaging background, capable of practicing state-of-the-art nuclear medicine. That specialist will also be a certified radiologist.

4. What is the availability of experiences and subspecialty areas during training?
Unlike other fields, nuclear medicine itself is often considered by many as a subspecialty of imaging. There are some more definable subspecialty areas, such as nuclear oncology (diagnostic and therapeutic), nuclear cardiology, etc, which are part of the residency training.

5. Are there sufficient elective opportunities during training to explore your special interests?
Flexible electives at home and abroad are possible.

6. What is the on-call schedule during residency?
During the nuclear medicine phase of combined training, the resident typically takes call for one complete weekend in four. During PGY2-5, residents take Radiology resident call.

7. What distinguishes the Uof A program from other programs?
The seven years of available funding to complete training in Nuclear Medicine and Diagnostic Radiology is an uncommon scenario. The scope, volume and breadth of cases seen in our program is enormous, probably unmatched in the country. Our equipment is generally state-of-the-art, including access to PET/CT and SPECT/CT facilities. Our philosophy of combined nuclear medicine and radiology training puts us in good standing with the current clinical and technological evolution of the specialty.

8. Who can we contact for more information? Is there a list of residents whom we can contact?
Contact the Residency Program office to put you in touch with faculty and residents.

9. How competitive is it to get in and then to succeed in your field?
“Competitiveness” is a function of supply and demand. Whereas our specialty is not one of the more traditional high-profile specialties, the relatively small number of training positions available nationwide, in relation to the number of students who do show an interest, results in a competitive selection process. Virtually all of our nuclear medicine residents successfully complete the program and do extremely well on their final Royal College exams.

10.a) Is there active and/or required research in your residency program?
Yes. Every resident is required to complete one research project in a nuclear medicine subject area by the completion of the training program.

10.b) What role does research play in your career?
Indirectly, I participate in or facilitate various research projects in both nuclear medicine and radiology. Other nuclear physicians have varying levels of research involvement.

11. What local, national or international conferences would be of benefit to candidates interested in your residency program?
Society of Nuclear Medicine Annual Meeting
Canadian Association of Nuclear Medicine Annual Meeting

FOR INFORMATION ABOUT RESIDENCY, ELECTIVES, and RESEARCH OPPORTUNITIES, CONTACT:
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