Specialty/Field Questions:

1. a) What are some strengths about your specialty? What draws and keeps people in your specialty?

If all the clinical specialties were spokes on a wheel, then diagnostic radiology would be the hub. It’s the most dynamic specialty in medicine. The way we image and the technology we use changes constantly – it’s what draws people to our specialty, and keeps them engaged years down the road. The modalities are diverse – as a radiologist you will gain expertise in digital imaging, ultrasound, computed tomography, magnetic resonance imaging, nuclear medicine, and angiography. Entering the specialty is just the beginning. On completion of residency you can choose to be a general radiologist (“jack of all trades”) or subspecialize in any number of fields, including pediatric imaging, neuroradiology, musculoskeletal radiology, interventional radiology, body imaging, Women’s imaging, and cardiothoracic imaging. You have a state-of-the-art PACS (Picture Archival and Communication System) at your disposal, use voice-recognition technology to issue reports, and have the opportunity to perform image-guided diagnostic and therapeutic interventions. Most importantly, diagnostic radiology is an engaging and stimulating field. Where else do you have the opportunity to see the most interesting cases, including the clinical diagnostic dilemmas, consult with teams from a variety of specialties, and make the diagnosis or offer up a relevant narrow differential diagnosis, all on a daily basis? You would be hard-pressed to find a radiologist who regretted their career choice.

b) What are some common complaints your specialty?

Everyone talks about working in a darkroom and never seeing a patient. Ridiculous! Nearly every facet of radiology now involves some procedural work, and that requires good patient communication skills. You may decide to become involved with therapeutic procedures (some of our radiologists have their own interventional clinics). Establishing rapport with patients is paramount, especially when performing minimally invasive image-guided procedures. You would be surprised at the number of procedures we do every single day, whether it be a CT guided biopsy of a pulmonary nodule, ultrasound guided abscess drainage or chemoablation of a liver tumor. One potential downside of the specialty is the reliance on expensive technology, but even that’s debatable.

2. Why did you choose your specialty?

I was a naive third year medical student on my Pediatrics rotation when I first realized the impact Radiology could have on clinical management – our team admitted a patient with a new onset stroke of uncertain etiology. The radiologist came in that night to perform an ultrasound that revealed a myxoma of her heart – she was operated on later that night. I was fascinated with the multi-disciplinary rounds we had with radiology, where so often the imaging provided the “answer”. That got me hooked – I’ve never looked back since.
3. What types of clinical cases do you commonly see?

It all depends on what type of radiologist you choose to be. A community radiologist would see a broad spectrum of cases from multiple disciplines, both adult and pediatric. A subspecialist would be exposed to cases that relate to their field of choosing that are often challenging.

4. Briefly describe a typical day.

The day usually begins at 8:00 am in both the hospitals and clinics. In a hospital setting, you protocol and prioritize the days’ requests and read out all of the overnight/weekend emergency cases. You supervise, interpret and report inpatient and outpatient studies throughout the day. You may be doing procedures if scheduled in the CT or ultrasound department or angiography suite. You will function as a consultant, discussing cases with clinicians either by phone or in person, and often times both. My colleagues in other areas of radiology would follow a similar pattern of reporting both inpatient and outpatient imaging studies and performing procedures (ultrasound/CT-guided biopsies and aspirations, contrast GI studies, etc) during the course of the day. In an academic center such as ours, we participate in teaching rounds at 7:30 am and both teaching rounds and multidisciplinary rounds with other specialties at noon. The day usually ends around 5 pm.

5. a) What are the varieties of lifestyles within your field?

Most radiologists are affiliated with a hospital practice, which means on-call responsibilities. You will have to work hard as a radiologist, the demand for imaging is relentless.

b) Specifically, how able is your specialty to accommodate family life?

Daily work hours are usually predictable. Call frequency and intensity is variable depending on the type of practice, but workloads are increasing and you can expect to be busy when you’re on call.

6. Range of incomes?

This varies depending on the type of practice, but usually begins at $400,000 to $500,000.

7. How do you see your discipline changing over the next decade?

Radiology is being increasingly viewed as a 24/7 discipline with demands for instant reporting becoming more common. Many groups have moved to a shift model, to cover evenings, and some have instituted an overnight shift to provide 24-hour coverage. Caseloads will continue to increase, especially in the current climate of long waiting lists and expectations from the public to have timely access to state-of-the-art imaging.

Residency Program Questions:

8. a) What are you looking for specifically in an impressive candidate?

This is a difficult question to answer, as many of our strongest residents actually come from very different backgrounds. A strong academic background is key, and a candidate must have good communication skills and work ethic. One myth is that you need a physics or engineering background to succeed in radiology – only a small percentage of our residents have such a background. You have
to be disciplined with regards to studying and employing a robust personal learning strategy, because there is a tremendous amount of knowledge you have to acquire over the residency.

9. How is your residency program organized? (i.e. year by year breakdown and schedule of rotations)
The Diagnostic Radiology residency is fully accredited by the Royal College of Physicians and Surgeons of Canada. It is a five year program which encompasses all of the major areas of study in Diagnostic Radiology. The first year is a clinical year, with rotations in Internal Medicine, Surgery, Peds, Ob/Gyn, Orthopedics, CCU, Emergency and Pathology. The final four years are dedicated to Diagnostic Imaging, with rotations through the various core and subspecialty areas. The residents have one academic half-day per week. This includes a structured didactic curriculum, as well as physics instruction, anatomy teaching, CanMEDS sessions and study/review sessions.

10. What is your residency program’s orientation and focus?
Our mandate is to train physicians to become highly qualified, fully competent radiologists. We ensure that our residents get abundant experience in all areas of radiological practice. Residents are fully prepared to take and pass the Royal College examinations. To this end, we stress preparation such as mock oral exams, MCQ exams and OSCE’s during the residency. Finally, we want all of our residents to recognize the importance of research and quality assurance in radiology. Understanding how research is done and developing the ability to critically read the literature is an important aspect of complete training in any specialty. Quality assurance is fast becoming an essential component of any radiology practice. Our residents are expected to complete at least one research project and QA audit during residency. We encourage residents who have an interest in research to pursue this avenue of training.

11. What is the availability of experiences in subspecialty areas during training?
We offer all areas of training within our teaching hospitals and subspecialty areas are part of both core and elective residency training. Our department has historically had limited fellowship positions, which means that residents have ample opportunity to participate in procedures, etc throughout the residency.

12. Are there sufficient elective opportunities during training to explore your special interests?
Absolutely. We have had residents complete electives in Edmonton, across Canada and even internationally.

13. What is the on-call schedule during each year of residency?
Variable, depending on the size of the resident cohort per year.

14. What distinguishes the U of A program from other programs?
Our referral base (Northern Alberta and part of BC) guarantees exposure to a huge breadth of pathology that rivals any program. We are fortunate to have our residents rotate through tertiary and quaternary care centers (UAH and RAH) and community hospitals (Sturgeon and Grey Nuns), the Cross Cancer Institute and the Stollery Children’s Hospital, gaining exposure to all facets of radiology. We have a very large teaching faculty, assuring our residents of daily one-on-one teaching and interaction throughout the residency. Our department has state-of-the equipment including new angiographic suites at UAH, RAH and Grey Nuns, multiple MRI scanners and state-of-the art multi-slice CT scanners. All of our reporting areas have been renovated recently, and all imaging is now reported electronically, via a region wide PACS (picture archiving and communication system) which our residents utilize. A 2-year rotating comprehensive didactic program runs during the weekly academic
half-day. All our residents are funded to attend a major radiology conference and to attend the AFIP (Armed Forces Institute of Pathology) radiology-pathology course in Washington, D.C. We are extremely proud of our resident cohort; they actively participate in developing and improving our program, which is why it is successful.

15.  a) Who can we contact for more information or to set up electives? Bobbie Kostuk (780-407-8528) is our elective coordinator. Contact Janet Dawson in our program office (407-6810) about specific aspects of the program or if you have questions.

        b) Specifically, is there a list of residents whom we can call or email? Our Chief Resident would be more than happy to answer your questions. He/She can be reached through our program administrator (Janet Dawson, 780-407-6810).

16.  How competitive is it to get in, and then to succeed in your field? Diagnostic Radiology has always been a highly sought after program. Once in the field, the relative shortage of radiologists in Canada coupled with the tremendous expansion of the field of diagnostic imaging makes the likelihood of success for those who complete the residency very high.

17.  a) Is there active and/or required research in your residency program? All residents are required to complete a research project during their residency.

18.  What local, national or international conferences would be of benefit to candidates interested in your residency program? The most relevant conferences would be the Canadian Association of Radiologists meeting held annually (usually in Montreal), the Radiological Society of North America (RSNA) meeting in Chicago, and the American Roentgen Ray Society meeting.

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