

## How to Plan Your Radiology Training: A Look Into Our Past

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In today's world a year goes by like a plane in the sky, a month disappears in no time, a week is gone in a flash and today will go by faster than a bullet. And just like that most of our radiology training has gone (*and is not coming back!!*). However considering that there are many of us and many to come I hope that we can impart some guidance to your radiology career that will help you in getting the most out of it. We will focus on the education that you need, where to gain it and how to plan the coming years.

Radiology is a rapidly expanding specialty that is on the leading edge of medicine. It has become a challenging specialty as the knowledge needed to become a valued radiologist has increased substantially since the advent of CT, MRI and PET scans. Even with excellent knowledge and good background training, a radiologist is put under the watchful eye and sometimes under a magnifying glass at repeated intervals. A radiologist is expected to know a variety of pathologies and their radiological interpretations in many imaging modalities. Furthermore physics, anatomy, physiology, medical and surgical aspects of disease, procedural skills, applications of imaging modalities, radiation biology and patient safety issues, and expertise and experience with oral, intravenous, and intra-arterial contrast agents are considered a part of radiologist core knowledge.

As medical knowledge, innovation and technology continue to expand, the capability of teaching hospitals to prepare residents for practice and promote life long learning skills has become increasingly vital. Core knowledge can only be improved by continuous reading,

applying knowledge in daily imaging rounds and interpreting images in daily film viewing sessions. Not only training in centers with all imaging modalities is important but also radiology training at a well organized and developed academic training center is a must.

One should not take any form of rotation or training sessions lightly. Monthly tests, film viewing sessions, grand rounds or multidisciplinary meetings in conjunction with other specialties are all extremely helpful in developing core knowledge. In order to improve radiology training foreign programs are developing evidence based practice in radiology (EBR).<sup>1</sup> It has been identified as an essential part of the training program. The usual medical training consists of problem-based self-directed learning. However in radiology, much of the formal teaching still tends to take place in a lecture format. Lectures induce relative passivity with our resident students. However EBR breaks up the learning process into five parts, as follows: asking, accessing, appraising, applying, and assessing. Different terms such as "ask, search, appraise, apply, and evaluate" are also used.<sup>1</sup>

Although it seems near celestial when we join radiology and sometimes it feels difficult to manage time for monthly tests and rotation in the beginning. Everything that is being talked about on images is either black or white with shades of grey. However it only takes time and effort. Formulate a plan, think of a strategy and stick to it. Read up well prior to in-training tests and examinations. Studies have shown that resident's average in-training examination score is a strong predictor of the written and oral board score. The resident with a low in-training examination score is at risk for poor performance on the written board examination.<sup>2</sup>

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In the first year try to focus on anatomy and physics which will develop a strong foundation. This will help you in getting through the intermediate module (IMM) which at this time is taken after two years of training by the College of Physicians and Surgeons (CPSP). But having a sound knowledge of anatomy and physics will also help you get through the rest of your radiology career without much difficulty, answer all questions and help train junior residents when faced with anatomical problems. During this time aim to complete synopsis so that you will have the year ahead to complete dissertation way before the final fellowship exam.

During your second year you should have done by reading a recommended text book at least two times. You will be done by IMM and hopefully synopsis. As you enter into third year things start settling down. Try completing the dissertation in third year. The last year you will gain a lot of confidence as you will be working independently, however having a strong core knowledge will make things easier. In the final year you will also be supervising junior residents who will look up to you for guidance. The most frightening experience for me was the time of giving independent and decisive opinions on different images during on call hours and conducting meetings. However I learnt that by avoiding I was not improving however with facing different situations, discussing with primary teams of patient clinical situation and using multimodality approach I was gaining confidence day by the day.

Your final year should also be focused on the fellowship exam which is a very difficult examination. The first attempt is the most important. During your final year you should also start looking for fellowships in Pakistan and abroad. Sometimes it takes up more than two years to acquire a subspecialty training spot so plan early.<sup>3</sup>

## References

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