



SCHOOL

Course report

Image-Guided and Adaptive Radiotherapy

5-7 October, 2020: Online

Course director: Coen Rasch, radiation oncologist, Leiden University Medical Center, Leiden, The Netherlands

Brief introduction

I began my career as a biomedical engineer after I finished my BSc in biomedical engineering in 2004. I took my MSc in medical physics in 2006, and in 2007 I started working at the personnel dosimetry department of the Greek Atomic Energy Commission. While I worked there, I studied for a BSc in radiology and radiation therapy technology and since 2016 I have worked at the "Agios Savvas" (Saint Savvas) Anti-Cancer Hospital in Athens, Greece.

Why did I choose to attend this course?

The installation of an Elekta Synergy linear accelerator (linac) had just been completed at the end of 2016 when I started work at the hospital as a radiotherapist. It was the first linear accelerator at the hospital that was capable of performing *cone-beam computed tomography* (CBCT). The whole team was just beginning to gain their experience of CBCT. Now an Elekta Infinity is being installed. This machine offers more possibilities in adaptive therapies. Therefore I chose to attend this course to gain a deeper understanding of image-guided and adaptive radiotherapy.

What aspects of the course were the most interesting and why? Did the course meet your expectations? If so, how? Did the course activities improve your knowledge and skills in the relevant subject?

The course helped me to understand several issues around image-guided and adaptive radiotherapy, such as the internal target volume, and it also helped me to distinguish the differences between strategies that are used in different radiotherapy departments. I also think that the individual presentations that covered each case of treatment (prostate, lung, breast etc) were very helpful because they provided more specific information about each anatomical area, for instance the bony versus carina registration for lung tumours. As a radiotherapist I was mostly interested in issues around image registration, patient preparation and positioning, but also in the delineation differences and possible uncertainties that might arise. Although there is no magnetic-resonance-guided linac at my workplace, I found the clinical practice of such a system quite interesting. Both the self-assessment entry examination and the exit examination were quite interesting and enlightening, since the correct answers were given afterwards and were explained based on the knowledge that was provided during the course.

List three important "takeaways" following the course. How will what you have learnt be implemented in your daily job / clinical practice?

The most important "takeaway" regarding my job position was the need for protocols, at least for the most common treatments, regarding the correct setup of the clipbox and the correct registration method after performance of each CBCT. This is something that is going to be implemented in our clinical practice.

How would you encourage someone who has never been to a course that is offered by the European Society for Radiotherapy and Oncology to join this course next year / in two years?

During coming years, I hope to find myself learning more about modern methods, especially when I need to implement them, and I would definitely recommend this kind of course to any one of my colleagues.



Eleftheria Nirgianaki
Radiotherapist
General Anti-Cancer Hospital "Agios Savvas"
Athens, Greece
e.nirgianaki@gmail.com

