



SCHOOL

In-room MRI-guided radiotherapy

8 October - 11 November 2020, online

Course directors

- *Uulke van der Heide, medical physicist, The Netherlands Cancer Institute - Antoni van Leeuwenhoek Hospital, Amsterdam, The Netherlands*
- *Luca Boldrini, radiation oncologist, Fondazione Policlinico Universitario "A. Gemelli" IRCCS, Rome, Italy*

An RTT perspective

Why did you choose to attend this course?

This course was of interest to both of us as we work on an Elekta Unity magnetic resonance linear accelerator (MR Linac). This course offered education on the physics behind the technology as well as giving us greater insights into the practical and clinical considerations of radiotherapy guided by magnetic resonance imaging (MRI). The multidisciplinary experts who were involved in the course and the nature of this course drew us to it as we felt the course content would be well rounded.

What aspects of the course were the most interesting and why?

Sophie: I really enjoyed the presentation on understanding artefacts in MRI from a clinical perspective. We see artefacts in clinical practice, and after this teaching I now feel better equipped to identify artefacts, understand their causes and appreciate the methods that can be used to mitigate them.

Joe: As I am new to MRI-guided radiotherapy, I found the introductory sessions to be particularly helpful for me to gain quickly an understanding of the current benefits and problems of the MR Linac environment and treatments for which it can be used.

Did the course activities improve your knowledge and skills in the relevant subjects?

Yes, the Q&A sessions were very informative and enabled aspects of the teaching to be expanded further in order to improve our understanding. Some questions drew input from different lecturers, which gave us a broader perspective on the topic.

The meet-the-professor sessions that we attended were clinically focused. They were very helpful as they provided discussion platforms where we could learn from what the experts and other centres were doing. The discussions covered radiotherapist training and competency, workflow development, patient safety and equipment set-up.

Did the course meet your expectations? If so, how?

Yes, we wished to gain a broader perspective of MRI-guided radiotherapy and this course provided it. Experts in both commercially available MRI-guided radiotherapy platforms gave us insight into these systems. The viewpoint of the radiotherapist, radiation oncologist and physicist were well presented.

List three important 'takeaways' following the course.

- Patient safety and comfort are the top priorities; safety screening and patient selection procedures are key
- Adaptive strategy is a balance between plan quality and time
- Quantitative MRI on the MR Linac provides exciting opportunities to measure treatment response

How will what you have learnt be implemented into your daily practice?

Overall, this course has improved our knowledge of, and confidence working with, an MRI-guided radiotherapy unit. We feel better able to contribute to discussions regarding the improvement of patient and unit workflow.

How would you encourage someone who has never been to a course offered by the European Society for Radiotherapy and Oncology (ESTRO) to attend this one?

The quality of the teaching was excellent and even though it was a virtual programme, it was very engaging, with weekly Q&A/discussion sessions. Overall it was a very valuable experience.



Sophie Alexander

Radiotherapy research superintendent radiographer
The Royal Marsden NHS Foundation Trust
Sutton, UK
Sophie.Alexander@rmh.nhs.uk



Joe McNeice

Senior rotational MR Linac therapeutic radiographer
The Royal Marsden NHS Foundation Trust
Sutton, UK
Joseph.McNeice@rmh.nhs.uk

