# SCHOOL



### **Course Report**

### **Dose Modelling and Verification for External Beam Radiotherapy**

4-8 March 2023, Malaga, Spain

#### **Course Directors**

- Tommy Knöös, medical physicist, Skåne University Hospital and Lund University, Lund, Sweden
- Brendan McClean, medical physicist, St Luke's Radiation Oncology Network, Dublin, Ireland

#### Could you please briefly introduce yourself?

My name is Menke Weessies and I am a resident medical physicist at the Maastro Clinic in Maastricht, The Netherlands. I am in the third year of my four-year residency.

#### Why did you choose to attend this course?

I was encouraged by Dr Ans Swinnen to participate in this course in order to increase my knowledge regarding our treatment planning systems, the differences among the available systems and the problems with each. It was an opportunity for me to enhance my understanding of how dose-modelling systems work.

#### What aspects of the course were most interesting to you and why?

For me, the aspects of dose related to the medium and/or water were very interesting. Moreover, discussions of dose measurements and the best detectors for different jobs gave me insights into the use of detectors, especially in small fields.

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

The course improved my knowledge of dose-modelling modalities and taught me new topics I didn't know about. My attendance at this course encouraged me to learn more in-depth about the different calculation models and how they are constructed.

#### List three important takeaways following the course.

- 1. Think about which detector would be appropriate.
- 2. I have to learn more about the calculation modalities and their underlying mathematics.
- 3. I gained knowledge of the role, challenges, advantages and limitations of the different dose-modelling modalities that are currently used in modern external beam techniques.

## How will what you have learned be implemented in your daily clinical practice?

I will be looking into the dose-to-medium versus dose-to-water calculations in the dose-planning algorithm Acuros.

## How would you encourage someone who has never been to an ESTRO course to join this course?

I would encourage medical physicist residents to follow this course during their residencies to enhance their knowledge of the different modalities.



Menke Weessies Medical physicist in residence Maastro Clinic, Radiotherapy Department Maastricht, The Netherlands menke.weessies@maastro.nl