## **PHYSICS**



## ESTRO 2022: the PhD student's perspective

The recent 2022 congress of the European SocieTy for Radiotherapy and Oncology (ESTRO), which was held in Copenhagen, Denmark, from 6 May to 10 May, provided the opportunity for many PhD students to present their initial findings. For many of them, it was also their first in-person conference experience. In this article, five PhD researchers, from different UK institutions and research fields, share their experiences of ESTRO 2022.

Hannah Chamberlin, second-year PhD student in risk prediction of radiation-induced breast cancer, University of Manchester

ESTRO 2022 was the first conference that I attended in person since I began my PhD, and I was grateful to present my work in a poster presentation. As this was my first in-person presentation outside my own institution, I was grateful to receive interesting questions and feedback from researchers at different institutions. This feedback provided me with new ideas to include in my work so that I can progress further.

What I most appreciated about ESTRO 2022 was the ease with which conversations could be held, either straight after a presentation or over coffee. I think this sort of easy discussion has been a particular challenge over the past two years amongst PhD students and early-career researchers, as they have less-established networks than those who have been researchers for many years. Time outside the Bella Center with colleagues and friends was also wonderful; a sunset dinner on the banks of Copenhagen's river was a highlight.

It was fascinating to experience the breadth of research that was presented at ESTRO. The teaching lectures particularly helped me to gain a clear understanding of many concepts that I have heard mentioned sporadically since I began my PhD, such as the use of artificial intelligence in radiotherapy. A special mention must be given to the humorous and meme-filled debates, which reflected my overall ESTRO 2022 experience, as they demonstrated the excellence of research in radiotherapy and the friendliness that I found in the radiotherapy physics community.

Nathalie Lövgren, first-year PhD student in the clinical implementation of FLASH radiotherapy, University of Oxford

Attendance at conferences is an important way for a PhD student to learn and network so as to further their development within research. Throughout the conference, I packed my schedule with interesting talks and stimulating conversations during networking in the evenings. I really valued the breadth of topics that were covered during the conference, as it enabled me to attend talks that were directly applicable to my research and to be exposed to new areas.

I particularly enjoyed the debates that were held throughout the conference. This was partly because I found it intellectually stimulating to listen to experts as they defended, or in some cases even had to argue against, their own areas of expertise. It was also because the presentations were delivered with wit and humour, which meant that they were engaging and interesting and the arguments were easy to follow, even as the listeners' thinking on the subject was challenged.

I would like to add that this conference would not have been the same without all the kindness and welcomes I received from the people I met throughout our days in Copenhagen. The friendly atmosphere played a big part in making ESTRO 2022 a great experience and I am very excited about ESTRO 2023.

Poppy Nikou, first-year PhD student who is developing methods to model head-and-neck cancer patients for robust treatment planning, University College London

ESTRO was both my first conference in the field and my first in-person conference. I attended the congress in London with my research group. We all appreciated the opportunity to showcase our work at oral talks and poster presentations. I was grateful to be able to show my poster over the weekend. It was brilliant to hear about cutting-edge research in the field from groups all around the world. I was impressed by the quality of the research presented throughout the symposium. The numerous tracks gave me the chance to branch out and hear about the latest breakthroughs in different areas.

ESTRO also catered to its young members as it offered lots of symposiums specifically for young researchers and networking opportunities at the congress. The in-person nature of these really showed us what we had been missing!

For me and my research group, the conference led to lots of great conversations that we hope will fuel new research and collaborations in the future. We are in the process of organising a workshop with our collaborators from the University of Manchester to discuss and develop ideas that were sparked during ESTRO. I can't wait for next year!

## Edward Taylor, first-year PhD student in the clinical implementation of FLASH radiotherapy, University of Oxford

ESTRO 2022 was the first conference I have attended in person since I started my PhD. What I greatly appreciated about the conference was the opportunity to hear from experts about the research I had never come across before and to discover questions at the cutting edge of research.

The variety of oncology research presented was quite overwhelming, and on many occasions, I found it difficult to choose among overlapping sessions. Outside the presentations and debates, the main auditorium was a hive of companies that were showing the latest medical equipment, software and innovations. Here, I was able to learn about the interplay between research departments and collaborators in the industry, and to meet research scientists and peers who moved between these circles. Hearing about their experiences highlighted the breadth of opportunity for collaboration and innovation in this field.

The conference offered my first opportunity to meet fellow early-career research scientists at other universities throughout Europe. This enabled me to understand what challenges lie ahead in my studies, but also to learn how other departments operate and what ideas could be implemented to benefit our group. The warm, welcoming city and the passion that permeated through the conference made me look forward to next year's congress.

## > Ceilidh Welsh, second-year PhD student in risk prediction and modelling of local recurrence and radiotoxicity in head-and-neck cancer, University of Cambridge

ESTRO 2022 was my first opportunity to meet other passionate researchers in this field and to engage all at once with the many fascinating aspects of radiotherapy and oncology. Although I was the only researcher who attended from my group, I did not feel alone; the congress provided lots of welcoming, open spaces and events at which I could share ideas with others and discuss research areas. This was particularly valuable as I started my research during covid, which impacted the connections I could make across the field.

Due to the variety of topics covered, I could learn about all the different facets of the radiation oncology workflow: from dosimetry and planning, through adaptive radiotherapy and clinical trials, to health economics. I especially enjoyed the aspects of the conference that looked outside technical research topics and discussed patients' experiences, from ways to consider the patients whom we don't see, to incorporating art into the patient treatment experience. For me, this truly reflected the focus of this year's congress, 'learning from every patient.

The energy and atmosphere at the congress have left me with renewed motivation and drive as I have taken new ideas back to my research group. The fantastic people, the advice and tips that were passed on over coffee and the future collaborations to be pursued, have made me very excited about ESTRO 2023.





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