



ESTRO 2021 RTT track report

- **Teaching lecture** - The role of RTT leadership in advancing multi-disciplinary research
- **Symposium** - RTT-led radiomics research

Teaching lecture - The role of RTT leadership in advancing multi-disciplinary research

It was an absolute pleasure to attend the teaching lecture about the role of leadership among radiation therapists (RTTs) in the advancement of multi-disciplinary research at the 2021 congress of the European Society for Radiotherapy and Oncology (ESTRO 2021), which was chaired by Sophie Perryck (chief radiation therapist, University Hospital of Zurich, Switzerland). Michael Velec, radiation therapist/clinician scientist at the Princess Margaret Cancer Centre, Canada, gave a passionate and inspiring talk about a topic, the choice of which I find very timely when many of us are on a pathway that leads towards leadership in radiotherapy research.

In the past decade we have seen radiation oncology evolve. As a result, the RTT curriculum has broadened and so has the contribution of RTTs to research. In his talk, Dr Velec discussed why the contribution of RTTs was unique and crucial in all steps of the clinical radiotherapy research pathway, including in submissions to ethics and regulatory bodies, implementation of new techniques, and data analysis and interpretation. His talk demonstrated how RTT support builds capacity and increases visibility in research. We already knew that RTTs played key roles in multi-disciplinary research, but Dr Velec highlighted new directions that should be the foundation of our curriculum so that we can embrace and further develop our roles in research and development. This teaching session also posed important questions for RTTs and the development of our future curriculum and advanced practice. Dr Velec said: 'RTTs are seen as being good collaborators but not necessarily as leaders. This is a very important reflection of where we are in multidisciplinary research and pinpoints the next challenge we must tackle. It was inspiring to see Dr Velec's example, and specifically his research on the pivotal contribution of RTTs to the radiotherapy pathway. We all look forward to hearing about his results, which will impact on how we design our curricula to take ownership and to target the future direction of our profession.'

Symposium - RTT-led radiomics research

The RTT-led radiomics research session, which was chaired by Ingrid Kristensen (oncology nurse at Skane University Hospital, Sweden) and Ms Perryck, was another excellent example of where advanced practice can take us in future.

William Tran, assistant professor in radiation oncology at the University of Toronto, Canada, gave us a fantastic overview of artificial intelligence and its role in the improvement of breast cancer outcomes. This inspiring talk highlighted the skill set that Dr Tran had developed to answer questions about personalisation of breast cancer treatment, specifically by combining lab-based techniques and radiomics. Dr Tran is another great example of an RTT who is leading advanced radiotherapy practice.

Michelle Leech, associate professor and head of radiation therapy at Trinity College Dublin, Ireland, not only provided a brilliant overview of the current evidence for the use of radiomics in prostate cancer but also showed the directions in which the use of radiomics in prostate cancer are aimed. Professor Leech's view regarding future research in this area is that radiomics can help in the differentiation of benign and malignant tumours and can be used to carry out biological adaptation in hypoxic tumours. I recommend that you watch this talk retrospectively, especially if you work in this field and did not have the opportunity to watch it live.

Aileen Duffton, lead research and development radiographer at the Beatson West of Scotland Cancer Centre, Glasgow, UK, gave an overview of the future direction of personalisation of radiotherapy in head and neck cancers. She emphasised the active contributions of RTTs to make these efforts happen and highlighted future research in which RTTs could act as leaders. Dr Duffton is leading on research that aims to find predictive biomarkers of radiotherapy response in oropharyngeal cancers through use of diffusion-weighted MRI. She also provided brilliant insight into the ways in which research benefits from a collaborative approach. Very inspiring, many thanks Dr Duffton!



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