Lisanne van Dijk

Dr. van Dijk's research focus is personalized radiotherapy through advanced machine and deep learning to predict treatment outcome and side effects with on radiotherapy, clinical and multi-modality imaging information. My experience in medical image processing, complex modelling, and my clinical expertise as a technical physician make me uniquely position to translate technical innovations to clinic-usable applications.

Dr. van Dijk's formal education as a Technical Physician gives uniquely positions her to translate technical innovations to clinic-usable applications. Her PhD is in radiomics and machine learning approaches to predict of radiation-induced toxicities and tumor outcome with multi-modality imaging in head and neck cancer patient. For her post-doctoral research at UMCG she developed a clinically-implemented deep learning organ segmentation model. Funded with a NWO Rubicon, she pursuit a post-doctoral fellowship at MD Anderson Cancer Center, to developed a model-based treatment decision support systems to select high-risk HNC patients for treatment escalation. Simultaneously, she initiated a clinical radiation dose escalation trial targeting high-risk HNC patients.

Funded by a KWF YIG, NWO VENI and Hanarth grant, she now leads the UMCG effort to use Artificial Intelligence to predict radiation-induced toxicity in head and neck cancer and lung cancer patients.