Master project:
Quantitative MRI for radiotherapy

To Medical Natural Sciences students that are looking for an internship

Quantitative imaging biomarkers derived from MRI techniques, like diffusion-weighted imaging (DWI) and dynamic contrast-enhanced (DCE-) MRI, have the potential to personalize radiotherapy treatment. As radiotherapy is often delivered in multiple fractions over the course of weeks, QIBs can be utilized in various ways, including the prediction of outcome to different radiation dose based on pretreatment images, adaptation of treatment plan during treatment, and response assessment after completion of radiotherapy. With the recent introduction of integrated MRI and radiotherapy treatment systems, the interest in imaging biomarkers for radiotherapy is growing.

We are looking for a master's student who wants to do their minor or master research project with us. You are highly motivated, your interests lie with image analysis, MR physics, and radiation oncology. According to your preferences, the project can be tailored to focus on MR physics, image analysis techniques, or machine learning/deep learning. We provide a desk at our department, an enjoyable working place, and supervision according to the MNS requirements. Your project will be embedded in the Van der Heide group at the radiation oncology department of the Netherlands Cancer Institute.

If you are interested, feel free to contact us: Petra van Houdt (p.v.houdt@nki.nl)

https://www.nki.nl/divisions/radiotherapy/van-der-heide-uulke-group/