



Vacancy for a Ph.D. student

on MRI tissue parameter extraction: reconstruction of physiological tissue parameters during hyperthermia cancer therapy

Job description

The goal of the project is to develop novel technology for processing of MRI data to extract tissue properties from the MRI measurements made during hyperthermia (heat) therapy. The applicant will focus on the MRI postprocessing using multiphysics simulations and control techniques in close cooperation with MRI and control experts at Erasmus MC and Eindhoven University of Technology. In this project, the technology will be investigated and tested using clinically measured MRI data. The candidate will work in a vibrant, multi-disciplinary research group, closely together with medical personnel, RF engineers, MRI experts and researchers and engineers of the MRI manufacturer.

Work environment

A healthy population and excellence in healthcare through research and education is what Erasmus MC stands for. Conducting groundbreaking work, pushing boundaries and leading the way. In research, education, and healthcare. We are practical people with a high level of expertise, working hard to renew healthcare of today and public health of tomorrow.

The project will be carried out at the hyperthermia research group of the Department of Radiation Oncology of Erasmus MC Cancer Institute. Strong partnerships on this project exist within Erasmus MC, e.g. the Department of Radiology and Nuclear Imaging, groups at Eindhoven University of Technology and the MRI manufacturer. Our institute is internationally at the forefront of Image Guided Therapy and offers a dynamic, challenging, multi-disciplinary and highly cooperative research environment.

Qualifications and skills

Candidates must have an MSc (or PhD) degree in a technical field (Electrical engineering, Physics, Biomedical Engineering, Mathematics, Informatics). Experience with (quantitative) MRI and/or experiments are an advantage, as well as experience with multi-physics simulations, programming and/or control techniques. You should be able to work in a multi-disciplinary team and be highly motivated for cutting edge research on theoretical studies, with experimental work and clinical implementation.

Terms of employment

You will receive a temporary position for 4 years. The gross monthly salary is € 2.222,- in the 1st year and increases to € 2.846,- in the 4th year (scale OIO). The [terms of employment](#) are according to the Collective Bargaining Agreement for Dutch University Medical Centers (CAO UMC). Being able to present a certificate of good conduct is a condition for the appointment.

Information

For more information about this position, please contact Dr M.M. Paulides, Assistant Professor, phone number: (+31)(10) 704 1610 or e-mail: m.paulides@erasmusmc.nl.

Application

Please send your application including Curriculum Vitae and accompanying letter by e-mail to: sollicitatie.danieldenhoed@erasmusmc.nl stating vacancy code 15.11.16.TDdH.