

The Department of Radiotherapy plans to appoint a

# **Postdoc Researcher**

((applied) physics, electrical engineering, technical medicine, biomedical engineering or related)

36 hours per week

## Work environment

The department of Radiotherapy of the Erasmus MC Cancer Institute is one of the largest departments of radiotherapy in Europe. In 2017 the installation and commissioning of linacs in the new building of Erasmus MC will start, whereafter the start of patienttreatment and move is planned voor 2018. The department has an extensive and renowned research program. For this purpose we have several partnerships. Besides, Erasmus MC, TU Delft, and LUMC have joint forces to realize the first treatment center for proton therapy in the Netherlands. Physics is of major importance in the research program, and a large part of the 60 employees of the Medical Physics unit is involved in research projects. The research is embedded in multi-disciplinary teams, consisting of radiation oncologists, (medical) physicists, mathematicians, technologists, and computer scientists.

## Job description

Are you interested in contributing to a dynamic group of physicists, engineers, doctors, and therapists to improve upon treatments of prostate and cervical cancer? Are you technically minded? Would a Post-doc project with an academic/Industrial partnership interest you?

If you have answered yes to these questions, Erasmus MC Cancer Institute is now accepting applications for a research position in High-Dose-Rate (HDR) brachytherapy (BT) in close cooperation with an industrial partner to develop an integrated pretreatment verification system. This system will make use of advanced electromagnetic tracking for 3-D positioning and orientation. Your tasks as a postdoctoral researcher will include:

- · Non-clinical and clinical validation of the prototype device;
- · Technical development and refinement of the prototype device;
- · Development of measurement and evaluation tools;
- · Clinical integration of the refined device for use in prostate and cervix HDR brachytherapy.

Once executed, you will investigate the significance of interfraction implant positioning in prostate HDR BT and the reconstruction accuracy of interstitial implants in treatment of cervical cancer.

The research will lead to innovative procedures for pretreatment brachytherapy verification integrated in daily clinical practice for interstitial prostate and cervix HDR brachytherapy and to scientific publications. You will receive a temporary position for 2 years.

#### **Qualifications and skills**

You are an excellent candidate with a PhD in (Applied) Physics, Electrical Engineering, Technical Medicine, Biomedical Engineering or related discipline. Excellent practical and technical skills as well as academic writing skills are required. Programming experience will be an advantage. Experience with research in radiation oncology will be an advantage. Knowledge of the Dutch language is preferred. You are highly motivated, ambitious, result-driven and an excellent team player. Being able to present a certificate of good conduct is a condition for the appointment.



## Terms of employment

The terms of employment are in accordance with the Collective Bargaining Agreement for University Medical Centers (cao UMC). The gross monthly salary amounts a maximum of  $\in$  4.842,- (scale 11), depending on your level of education and experience. You will receive a temporary position for 2 years.

# Information

For more information about this position, please contact Dr. Ir. I.K.K. Kolkman-Deurloo, Medical Physicist (003110-7041407 or e-mail <u>i.kolkman-deurloo@erasmusmc.nl</u>). For other information please contact A.S. de Wringer-van Vliet MBA, sectormanager Medical Physics (003110-7031248 or e-mail <u>a.dewringer@erasmusmc.nl</u>).

# Application

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

No vacancies.