



*Maastrto is a nationally and internationally renowned institute that provides radiation therapy (radiotherapy) to oncological patients for the province of Limburg, from the main location in Maastricht and from its branch at the location of the VieCuri Medical Center in Venlo. We connect patient care, education and scientific research with approximately 330 employees.*

Maastrto is looking for a:

## **PhD-student for research in clinical radiotherapy**

**36 hours a week**

### **Job description**

In this position you will develop, in a team, and in collaboration with a major medical company, several methods to discover treatment errors during photon radiotherapy. These methods will be based on portal imaging and artificial intelligence (AI). Explainable AI will be incorporated to allow justifying clinical decisions. A novel method to verify AI solutions will be developed. The work entails working with large collections of medical data of lung cancer patients.

The research division of Physics Research specializes in the combination of CT imaging, precision irradiation, radiation dose calculations, and dose verification. We work on several areas such as medical imaging, artificial intelligence, and photon and proton therapy. Our overall aim is to enhance radiotherapy treatment quality and safety.

### **What we ask**

We are looking for a researcher with an excellent track record as a MSc student (GPA at least 3.5 on a scale of 4) in a field such as (bio)medical engineering, medical physics or data science. Ideally, you have some knowledge of radiotherapy, radiation physics, and imaging. You should have a strong interest in radiotherapy research and technology development. Knowledge on AI methods is an advantage. Excellent programming skills are a must.

Our new team member should be a dynamic co-worker, willing to work in a highly motivated team of physicists and physicians. Although you will work in a close team, you should also be able to work independently. If you live abroad, you should be willing to relocate to the Maastricht region of the Netherlands (which is also close to Germany and Belgium). English language proficiency (written and spoken, better than IELTS 7, or equivalent) is required. Proficiency of the Dutch language is not a requirement, but acquiring a basic knowledge is encouraged and facilitated.

### **What we offer**

We offer you a fulltime contract (36 hours/week) for an initial period of one year, which in case of a successful evaluation may be extended for three more years. The Collective Labour Agreement for Hospitals (CAO Ziekenhuizen) applies. Your salary will be according to salary scale FWG 50 (min. € 2.759,- gross/month). Furthermore, you will receive a 8,33% holiday allowance and a 8,33% end-of-year bonus. We invest in development of our employees and as such offer a wide range of options for personal development including hard and soft skills courses. We also invest in the employability and vitality of our employees and as part of this offer discounts on for example sports subscriptions and bikes. Applications from abroad may qualify for the advantageous 30% tax rule and a moving costs reimbursement. In case a residence/work permit is required, our HR department will assist with the application.

### **More information**

Prof. Dr. Frank Verhaegen (Professor and head of Physics Research department) is happy to provide information about this vacancy on +31-88 4455792 or by e-mail: [secr.pz@maastro.nl](mailto:secr.pz@maastro.nl). You can also call us via our central telephone number: 088-4455600.

Application for this position is possible until October 3 2022.