

The radiotherapy institute MAASTRO CLINIC provides cancer care to patients in the South-East region of the Netherlands. MAASTRO CLINIC works closely with the radiotherapy department of the University Hospital Maastricht (MUMC+) in the fields of education, clinical and pre-clinical research. MAASTRO's strategic goal is to deliver "individualized medicine" by applying advanced medical technology and scientific research the cancer treatment will be tailored to the clinical, biological and genetic characteristics of an individual patient so that the best outcome can be achieved. MAASTRO CLINIC and the MUMC+ is a Dutch candidate site for proton radiotherapy.

MAASTRO CLINIC is a radiotherapy treatment and research facility embedded within the GROW research institute of the Faculty of Health, Medicine and Life Sciences at Maastricht University. Research carried out in the past has focused on PET/CT imaging, dual energy CT imaging, 3/4D ultrasound imaging for treatment verification, dose guided radiotherapy (DGRT), and proton therapy verification techniques, small animal radiation research.

The Clinic has seven permanent physicists, several technicians, informaticians, and 25 PhD students/postdocs and is fully equipped with the latest linear accelerators, verification imaging devices, a brachytherapy suite, a PET-CT scanner, a wide bore CT scanner, 3D ultrasound imaging systems, many treatment planning stations etc. Together with the Radiobiology Lab (MAASTRO LAB) we installed a fully equipped small animal irradiation/imaging facility for pre-clinical research. We are one of the leading research centers in precision irradiation for small animals. MAASTRO CLINIC collaborates with TU/Eindhoven, University of Toronto, the McGill University of Montreal, the University of Leuven, the Netherlands Cancer Institute, and we host an international in-silico trial on particle therapy.

### **MAASTRO CLINIC has a vacancy (1-year position) for a:**

#### **PhD student in imaging techniques for precision irradiation in pre-clinical research (M/F)**

**In this position you will carry out** research in the field of precision irradiation for small animals (mice, rats). This is a novel field of research where a combination of precision irradiation, imaging and e.g. chemotherapy are explored for treatment of cancer. Your project will be about integrating advanced imaging such as dual energy CT, spectral CT and bioluminescence into a precision irradiator. For this, you will have access to a highly novel, cutting-edge experimental device which is equipped with a precision irradiator, a micro CT scanner and a bioluminescent camera. MAASTRO CLINIC plays a leading role in this field. The project will be in close collaboration with a team of physicists, biologists and engineers. There will also be collaboration with the developer of the research platform.

**We are looking for a** candidate with a strong Masters degree in Physics, Biomedical Engineering or similar, with a strong and proven interest in pre-clinical research. We expect you to have an outstanding GPA (international grading system) of at least 3.5/4 for your Masters degree. You must be an excellent and enthusiastic software developer; experience with MATLAB is a plus. Experience with imaging and/or radiotherapy is a plus. Experience with publishing research papers is also a plus. The enthusiastic candidate that we are looking for must be very fluent in English, both spoken and written. The candidate must work well in a team, but should also be able to work independently on several projects. The position involves no or minimal teaching duties. You must provide two letters of reference upon selection. **The position is initially for 1 year, it may be extended for several more years,** depending upon funding and research results.

**We offer** an exciting project in advanced pre-clinical radiotherapy, a pleasant working environment in a multidisciplinary team, with many learning opportunities. Conditions of Employment and salary are based on the Dutch Collective Labour Agreement for Hospitals (CAO-Ziekenhuizen). You will receive a fulltime contract (36 hours/week) for an initial period of one year. Your salary will be according to the scale of scientific researcher level 4 of MAASTRO CLINIC (with a minimum of € 2.249,- gross/month), depending on your relevant experience. Furthermore the Collective Labour Agreement offers an extended package of secondary conditions, among others an 8%-holiday bonus, a 8.33% end-of-year bonus and excellent pension and health insurance arrangements.

**Further information** may be obtained from Frank Verhaegen, Head of Physics Research, by e-mail: [frank.verhaegen@maastro.nl](mailto:frank.verhaegen@maastro.nl) or by calling +31-(0)88-4455792. Please also visit [www.maastro.nl](http://www.maastro.nl) and [www.grow-um.nl](http://www.grow-um.nl)

**Your application letter, Curriculum Vitae and listing of publications** can be sent before November 7th 2014 by e-mail to [jobs@maastro.nl](mailto:jobs@maastro.nl), mentioning vacancy number 20141107.