



Position Vooijs Lab Postdoc or PhD

Stem Cell Biology

About us: The overall aim of the Vooijs group is to identify actionable targets in the Notch signalling cascade that can be used to safely target cancers or to promote normal tissue regeneration using basic and translation research. We have excellent research facilities and basic translational and clinical scientist in our department.

Your role: Your project will involve characterizing the role of a metal transporter in intracellular vesicles on Notch regulation that was identified in our lab as a novel essential regulator of Notch activity in stem cells using in vitro /ex vivo cell models. The key objectives are 1) To identify how this metal transport(er) affects Notch localization, trafficking and transcriptional activity and 2) to modulate Notch activity through metal transporter activity to direct cell differentiation or promote self-renewal. You will apply pharmacological, gain and loss of function approaches in Notch-dependent 2D and 3D organoid (patient) models, generate knockin cell lines expressing fluorescently tagged endogenous Notch proteins to follow their fate to allow dynamic high-resolution live imaging (Confocal, STED, EM) and in vivo tissue expression analysis to decipher how metal transporter influences Notch activity and can be used to control direct cell differentiation and cell renewal in disease and regenerative applications.

Requirements: We are looking for an ambitious and enthusiastic MSc molecular biologist or Postdoc with a background and track record (1st author publications) in molecular and (stem) cell biology. Experience with (live) optical imaging is preferred. Proficiency in English and good communicative skills and team player mentality is a must. Job responsibilities postdoc also include the co-supervision of (PhD) students and technicians in the Notch group.

Our conditions of Employment: 36 (postdoc)-48 months (PhD) months according to the collective labour agreement of Dutch Universities.

Your workplace: Maastricht University, GROW Institute for Oncology. At the department of Radiotherapy, we conduct fundamental and translational research and are affiliated with the MAASTRO patient clinic and the Maastricht Comprehensive Cancer Centre. The department has four PI led groups with research themes in tumour cell metabolism, cell death, extracellular vesicles and Notch signaling and stem cell fate. Furthermore, we have core facilities for NextGen sequencing, iPSC facility, high resolution (live) optical and (cryo) electron microscopy and mass spectrometry imaging (M4I).

Information: marc.vooijs@maastrichtuniversity.nl and www.maastrolab.nl

Application: Submit one pdf file with a cover letter including a summary of your research experience, scientific interests and academic and career goals, CV and contact info for three references. Application deadline: 25 May. Start before September 15st.