Post-doctoral researcher
Molecular Imaging of neovascularisation and hypoxia in atherosclerotic lesions.

Description
The project entitled “Multimodal Molecular Imaging of neovascularisation and hypoxia in atherosclerotic lesions” aims to advance quantitative in vivo Molecular Imaging using a multimodality approach (e.g. PET and MRI) from preclinical to clinical studies.

Project aim
Rupture of an atherosclerotic plaque is the main cause of the clinical symptoms of cardiovascular diseases such as acute myocardial infarction and ischemic stroke. For a ‘plaque at risk’, the risk of rupture is determined by morphological, molecular, biological and biomechanical parameters of the plaque. Focusing on the carotid artery, the ParisK consortium will construct technological and translational platforms in which several novel imaging modalities will be advanced, validated and added to existing non-invasive imaging modalities to measure one or more parameters of plaques at risk. The data will be integrated to develop a novel heuristic algorithm that gives the predicted risk of rupture of an individual plaque, which will be validated in subsequent clinical studies. The objective of the present project is to assess neovascularisation and hypoxia using multimodality Molecular Imaging (PET/MRI) in experimental models of atherosclerosis and in patients.

Environment
We offer a challenging research project within a large consortium with academic and industrial partners which will enable the candidate to perform state-of-the-art research on highly advanced imaging equipment (PET and MRI) in a national consortium of leading experts on imaging of atherosclerosis. You will be part of a multi-disciplinary team. Performing research within this consortium will provide you with an excellent network of contacts that can be of great value for your future career. Opportunities include pre- and clinical validation of novel imaging methods for atherosclerosis. You will be working in a stimulating interdisciplinary team at the Cardiovascular Research Institute Maastricht (CARIM) in the Netherlands. CARIM is one of the internationally leading institutes on cardiovascular research and an international review committee judged the research on imaging as excellent. Maastricht is a historic town in the south of the Netherlands, close to the borders of Germany and Belgium.

Requirements
We are looking for a post-doctoral researcher with interest in Molecular Imaging and Cardiovascular Disease. You are able to work in an inter-disciplinary environment and you have excellent communicative and organizational skills.

Conditions of employment
You will have a full-time employment for 1 ½ years at CARIM.

Application
For more information, please contact:
ME (Eline) Kooi, PhD, eline.kooi@mumc.nl; tel: +31 43-3874910 and/or
J (Judith) Sluimer, PhD, S.Heeneman@PATH.unimaas.nl; tel: +31 43-3976629