

The Interuniversity Cardiology Institute of the Netherlands (ICIN) is an institute of the Royal Netherlands Academy of Arts and Sciences (Koninklijke Nederlandse Akademie van Wetenschappen - KNAW), performing basic and clinical research in the field of cardiovascular diseases. The ICIN is an alliance of the cardiology departments of the eight university medical centers in the Netherlands. Research projects are carried out on campus.

For a research project to be carried out in the Department of Biomedical Engineering of the Erasmus MC in Rotterdam, in co-operation with the Leiden University Medical Center and the University Medical Center Utrecht, we are seeking an excellent candidate for the position of

Junior Researcher

Research

Rupture of atherosclerotic plaques that are located in the large arterial vessels are responsible for life threatening cardiovascular events such as acute myocardial infarction or stroke. In a new project we will study hemodynamics related biological mechanisms that may locally enhance the risk of atherosclerotic plaque rupture. Patients selected for operation at the carotid arteries will be studied applying highly sophisticated techniques including multislice CT, (immuno)histochemistry and computational fluid dynamics. Combination of these techniques allows studying the relationship between biomechanical flow related parameters using patient specific 3D reconstructions and the local plaque composition.

Local embedding

The Department of Biomedical Engineering – Hemodynamics Laboratory of the Thoraxcenter performs patient based research projects on hemodynamics related development and progression of atherosclerotic disease. Research has an impact on several clinical fields, as reflected by collaboration, within the Erasmus MC, with the Cardiology, Surgery, Radiology and Neurology Departments.

Requirements

Applicants have a master's degree in preferably biomedical engineering, biomedical science, physics, electrical or mechanical engineering. Knowledge of image processing and affinity with histological processing and computational fluid dynamics is required to be able to successfully finish the project. The research project will result in a PhD thesis.

Conditions of employment

The applicant will be employed by ICIN-KNAW. The appointment will be for a 4-year period. Salary according to the Collective Labour Agreement of the Dutch Universities (CAO-NU), scale 10, starting between € 2179 and € 2517 gross per month, related to age and experience. The researcher will take part in courses offered by the COEUR.

Application and Additional Information

Interested candidates can send their application, including Curriculum Vitae and reference letters or reference contact information, to Mrs. Dr.ir. J.J. Wentzel, c/o ICIN, PO Box 19258, 3501 DG Utrecht. For information you can contact Dr Wentzel at j.wentzel@erasmusmc.nl, or 010-4088039. Information on the ICIN to be seen at: www.icin.knaw.nl. Information on the Thoraxcenter, Biomedical Engineering to be seen at: www.thoraxcenter.nl

Closing date for applications: March 25, 2005