



VU medisch centrum
de Boelelaan 1117
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<http://www.vumc.nl/werken>

Vacancy number
D6.2008.00099



Department

The department of epidemiology & biostatistics participates in the DeCoDe project of the Center for Translational Molecular Medicine (CTMM, www.ctmm.nl). This recently started is coordinated by VUmc and aims to Decrease Colorectal Cancer Death (hence DeCoDe). The project consists of a consortium of five university medical centres and eight industrial partners in The Netherlands, that jointly work in the fields of early molecular detection, personalized therapies and molecular imaging of colorectal cancer (www.ctmmdecode.nl). This 5-year project is funded by the Center for Translational Molecular Medicine.

Colorectal cancer (CRC) ranks second as cause of cancer related mortality in the developed world. Research topics within DeCoDe include stool DNA testing, proteomics testing, and molecular imaging for early detection of colorectal cancer, developing molecular diagnostic tests for prediction of prognosis and response to drug therapy, image guided surgery and developing new molecular radiopharmaceuticals for PET in patients with metastatic colorectal cancer.

Background of the function

The PhD student will work on establishing powerful automatic prediction procedures based on molecular and clinical data for improved classification of colorectal cancers. This involves use and adaptation of several classification techniques. In particular, the student studies whether combining several types of molecular markers, e.g. DNA copy number changes, promoter methylation and proteins, into one classification procedure improves classifiers based on one type. Several approaches to make the classifier efficient need to be considered, such as feature selection and step-wise procedures. Moreover, considerable effort should be made in defining a clinically relevant classification error. The findings will be published in peer reviewed scientific journals and result in a PhD thesis.

Requirements

The applicant should be an enthusiastic young scientist with a master degree in (bio-)informatics or statistics. He or she should be very interested in molecular biology, cancer research and translating science into clinical applications. Programming skills are essential. Knowledge of the statistical language R or the intention to learn it is required. The candidate should be independent as well as a team player. Good communication skills and high level of English (spoken/written) are important.

We offer

A position in the department of Epidemiology & Biostatistics. This department aims to provide high-quality data analysis solutions to other parts of the VUmc. It includes an active group of researchers providing consult and new methodology for genomics data analysis. This is a joint project with the Tumor Profiling unit of the Pathology department, which investigates molecular tools like microarrays, DNA methylation assays and proteomics techniques and translate these into clinical applications for improving early diagnosis and therapy for colorectal cancer.

PhD students will be appointed on a temporary contract for a period of four years. The gross salary per month will be according to the OIO scales, depending on previous experience. The terms of employment will be in accordance with the CAO Universtair medische centra.

More information?

Please contact Dr.ir. M.A. van de Wiel, Coordinator genomics data analysis, Department of Epidemiology & Biostatistics, Telephone: 020-4442368/5987679, Email: mark.vdwiel@VUmc.nl or Prof. dr. G.A. Meijer, Project leader CTMM-DeCoDe, Department of Pathology, Telephone: 020-4444852, E-mail: ga.meijer@VUmc.nl.

How to apply

Please mail your application and your CV to wervingcluster6@VUmc.nl.

You can also send your application and CV by post to: VUmc, Divisiebureau divisie 6, mw. C. Egberts
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