

Postdoc: bioinformatics analysis of whole-exome sequence data

Function title postdoc

Where Bioinformatics Laboratory, Academic Medical Center, Amsterdam

Apply before September 1, 2010

Project

Next generation sequencing technologies have enabled quick and reliable sequencing of the so-called 'exome' of individuals. The exome comprises the coding region of the genome. Whole-exome sequencing and subsequent bioinformatics analysis enables the identification of gene(s) underlying a disorder. In the AMC several exome projects have already started and we expect a rapidly growing interest for this approach for both research and diagnostics. For this project you will be responsible for the bioinformatics analysis.

Tasks

The candidate will be embedded in the Bioinformatics Laboratory and will (a) implement a processing workflow for whole-exome data, (b) perform bioinformatics analysis in collaboration with various clinicians within the AMC and (c) develop new methods and approaches for the analysis of exome data.

The processing workflow will include methods for pre-processing, identification of sequence variants, comparison to public (SNP) databases, (statistical) comparison and visualization of data. You will use this workflow to analyze data on a routine basis. To enhance the analysis of the data you develop new methods and approaches. You will (co-)author scientific publications based on the results of your data analysis or on methods you have developed.

Employment

The Academic Medical Center (AMC) is the most prominent medical center in the Netherlands and one of the largest hospitals. The AMC complex houses the university hospital and the medical faculty of the University of Amsterdam, as well the Netherlands Institute for Neuroscience and the medical department of the Royal Tropical Institute. Also a number of biotech companies - partly AMC spin-offs - are located on the premises.

You will be working at the Bioinformatics Laboratory (www.bioinformaticslaboratory.nl) that is part of the department for Clinical Epidemiology, Biostatistics and Bioinformatics. The Bioinformatics Laboratory develops bioinformatics and e-Bioscience methods and expertise for the extraction of knowledge from biomedical data.

Requirements

We are looking for an enthusiastic communicative team player with

- a PhD in a relevant scientific discipline;
- strong background in bioinformatics;
- experience with the analysis of (next generation) sequence data is very useful but not mandatory;
- experience with the statistical package R
- good programming skills (e.g., Perl, Java) and knowledge of Unix
- good communicative skills

Additional conditions of employment:

The appointment will be on temporary basis for three years with the possibility to apply for a permanent position thereafter. After one year there will be an evaluation. Based on a full-time appointment (36 hours per week), compensation will be according to standard salary levels for postdocs according to skills and experience (scale 10, max €3860,- gross per month)

Additional information about the vacancy can be obtained from: Prof. dr. Antoine van Kampen Bioinformatics Laboratory



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www.bioinformaticslaboratory.nl

Contact: Applications should include a detailed curriculum vitae and a letter of motivation, and be sent to:

AMC Medical Research BV. HR service desk Postbus 22660 1100 DD Amsterdam The Netherlands