Bioinformatician for support of metabolomics data analysis

Institute	Academic Medical Center (AMC)
	Amsterdam, the Netherlands
Department	Bioinformatics Laboratory
Hours/week	36
Contract	Temporary for one year
Closing date for	
Applications	1 February 2012

Employment
The Academic Medical Center (AMC; www.amc.nl) is on of the most prominent medical centers in the Netherlands and one of the largest hospitals.
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.

Function
The analysis of high-throughput LC-MS metabolomics data is still a challenge. Only few (statistical) methods are currently available for analysis of LC-MS data, and these still require further tuning and development for specific applications. In this project we aim to further extend and apply the current processing workflow for the analysis of LC-MS metabolomics data that should eventually include methods for, e.g., smoothing, baseline correction, peak finding, alignment of chromatograms, metabolite identification and quantification, basic statistical analysis and more advanced (multivariate statistical) analysis. We aim to use existing methods as much as possible and, therefore, in essence this is not a research project but a project aimed at providing bioinformatics support. The project is part of the FP7 LeukoTreat project, which targets therapeutic challenges in leukodystrophies. Leukodystrophy refers to progressive degeneration of the white matter of the brain due to imperfect growth or development of the myelin sheath. In the project we will focus on lipidomics, i.e., the metabolomics analysis of lipids. The current position will be part of a collaboration between the Laboratory for Genetic Metabolic Diseases (www.labgmd.nl, AMC) and the Bioinformatics Laboratory (www.bioinformaticslaboratory.nl, AMC). We closely collaborate with the Netherlands Metabolomics Center (NMC; www.metabolomicscentre.nl).

Tasks
The candidate will be embedded in the Bioinformatics Laboratory and will implement a workflow for processing LC-MS metabolomics data. He/she will use existing methods (e.g., xcms) as much as possible and develop new modules when required. The candidate will analyze datasets generated by the Laboratory for Genetic Metabolic Diseases and produce clear reports about the results. The candidate is willing to contribute to meetings of the LeukoTreat project.

We ask
You must have a BSc, MSc or PhD degree in (bio)informatics, Medical Biology, Life Sciences, (Bio)chemistry or in a related field. The candidate has a background in data analysis, good programming skills, and preferably knowledge of and interest in biological, lipidomics, LC-MS metabolomics, and the statistical package R.
We are looking for an enthusiastic, social and communicative team player. The candidate is willing to support biologists with metabolomics data analysis.

We offer
A bioinformatics position. The appointment will be on temporary basis for one year. Based on a full-time appointment (36 hours per week), compensation will be according to standard salary

levels and dependent on skills and experience. We strive to find opportunities to extend the appointment after one year.

Information
For more information see http://www.bioinformaticslaboratory.nl or contact prof. dr. A.H.C. van Kampen (Antoine), phone +31 20 5667096 / 06-41768067 or preferably by e-mail: a.h.vankampen@amc.uva.nl

Applications
Send your application letter and resume (both as pdf document) by email to
a.h.vankampen@amc.uva.nl