Job Offer Announcement	**Vacancy Code 117_CRI_EFM**

Job title	IT Expert in the field of metabolomics
Job description	A position is available in the Metabolomic platform, Food quality and Nutrition department of the Research and Innovation Centre, with the aim to participate in the development providing informatic support. In particular, the new collaborator will be responsible for the systematic organization of research projects of the platform, including data storage, conversion, backup, and the elicitation and organization of relevant meta-data. All these aspects should be automated as much as possible, and appropriate documentation for all developed software should be produced. The candidate will complete the current workflow for processing LC-MS and GC-MS metabolomics data, collaborating also with the Group of Biostatistics and Data Management. He/she will use existing methods already part of the FEM metabolomics pipeline (mostly based on open source tools e.g., R, xcms, mzMine, etc) as much as possible and develop new modules when required. The candidate will interact with other research groups in and outside FEM. The work will be done in an exciting environment with access to real, large scale metabolomic experiments.
Duties / Tasks	To complete the current processing workflow for the analysis of MS metabolomics data it is necessary to develop the following tools: • Metadata sw development and development of databases: A web-based registration system for new experiments, managing the collection of relevant metadata of each experiment, such as the detailed information about the samples, the aim of the experiment, the desired analytical techniques, the experimental design and the total number of samples, special requirements regarding sample processing and/or grouping of the samples, etcetera. This system should also provide summary information for the platform activities during the year; • Following this, an automatic file structure should be created with computer-generated consistent naming schemes, and automatic data conversion, storage and backup strategies should be implemented. This should be connected to the currently operational data processing pipeline; For standard, recurring tasks without an analytical research component, separate data processing pipelines should be developed leading to automatic production of the desired results for the platform customers, such as data tables and automatically generated reports. Many of these aspects should be implemented in a LIMS-like structure, with a strong focus on easy maintainability and extensibility. Providing up to date accurate documentation of these tools is essential
Keywords	Metabolomics, high-throughput analysis, mass-spectrometry, chromatography, analytical chemistry, LIMS

Contract type and length, Level	CCPL FEM contract, Technologist 4th level, 24 months
Languages knowledge *from Common European Framework of Reference for Languages (CEFR)*	Advanced English (C1)
IT knowledge	Experience with Linux. Good programming skills (e.g., Perl, Java, Python, R)
Required title to join the selection	MSc in informatics, chemistry, computational chemistry or related area
Required experience	Solid experience in the area of programming and data basing, preferably with experience in analytical chemistry and biochemistry. *Essential*: - Strong background in programming, bioinformatics, scripting *Preferential*: - Knowledge or a proven interest in (analytical) chemistry and biology - Knowledge of mass spectrometry and metabolomics technology - Experience in LCMS and/or GCMS-based metabolic profiling and metabolomics data processing - Background in plant biology
Psychosocial skills	Ability to work both independently and in close collaboration with bioinformaticians, biochemists and biologists in an internationally oriented research group; Excellent communication skills
Supervisor	Urska Vrhovsek

Application

To apply for the position the applicants should send a message mentioning in the subject the recruiting code (**117_CRI_EFM**) to the email account **curricula[AT]fmach.it** including an up-to-date CV (Please add the following phrase to your CV otherwise your application will not be considered: **I consent to the use of my personal data in accordance with the provisions of decree 196/2003**).
Save your file in this way: **Surname Name_cv.doc** or **.pdf**;

Deadline

The deadline for the submission of the applications is **March 4th, 2013.**

Short list candidates

FEM will short-list the applicants. We will notify the short-list candidates for an interview in San Michele or for a phone interview. The other candidates will be notified at the end of the recruiting procedure.

Information about CRI

The Research and Innovation Centre of the foundation (CRI), with more than 250 employees, has a mission to promote and enhance the Trentino land-based economy through studies and innovation that improve agricultural and environment products and enhance the quality and nutritional value of food products. It sustains the region's environmental resources through development and promotion of low-impact agricultural practices, study and preservation of biodiversity, and characterisation of alpine and subalpine ecosystems. The centre operates fully integrated research programs and state-of-the-art platform technologies to deliver innovative solutions and competitive products for our stakeholders and end-user communities.

Equal opportunities

The position is open to both genders, Law n. 903, 9/12/1977, art. 1. The policy and practice of the Edmund Mach Foundation require that all staff are offered equal opportunities within employment.

Data treatment

All data supplied by applicants will be used only for the purposes of determining their suitability for the position and will be held in accordance with the principles of the Personal Data Protection Code, Legislative Decree no. 196 of 30 June 2003. By sending the Cv and application, the candidate consent and authorize the Foundation to the use of his/her personal data.