

Job description

Selection code: 205_CRI_MBM

This document has been translated into English for the convenience of international readers. For any matter concerning its interpretation, execution and/or validity, the Italian document is the authoritative version.

Type of post and number of positions vacant	N. 1 (one) fixed term position for 18 months* of level R3 Researcher in the field of untargeted metabolomics analysis of biofluids, applied to human nutrition (projects JPI Healthy Diet Healthy Life).
Organisational structure and manager for the position	Research and Innovation Center (CRI), Department of Food Quality and Nutrition (DQAN). * The contract can not exceed the date of December 31, 2017 (the duration of the contract will eventually be reduced so as not to exceed the stated date).
Requirements necessary for participation	<ul style="list-style-type: none"> • Master of Science in: Chemical sciences (or equivalent) And <ul style="list-style-type: none"> • PhD in Analytical Chemistry (or equivalent) And <ul style="list-style-type: none"> • Knowledge of written and spoken English (minimum level C1), evaluated during the interview.
Exclusion from the recruitment process	The following may not participate in the recruitment process: <ul style="list-style-type: none"> • temporary staff who worked for the Foundation with same level contract for a duration of more or equal of 18 months; • project workers for a duration of more or equal of 54 months; • people who worked, with reference with the two above declaration, between temporary and project work for a duration of more or equal of 54 months.
Job description	The work will aim mainly to conduct research in the field of mass spectrometry applied to the study of nutritional biomarkers. It will involve conducting instrumental analysis and data analysis from samples collected during dietary intervention studies. In particular the position will require the capability to develop and apply, with adequate autonomy, methods for the global analysis of the organic metabolites in biofluids, by mass spectrometry (MS-metabolomics). The successful candidate will be expected to develop and apply LC-MS based methods (in particular, LC-HR-MS/MS and triple quadrupole) and GC-MS for the identification and quantification of small molecules in matrices such as plasma, urine and feces. The successful candidate will contribute to data treatment, data analysis and interpretation, and to biomarker identification and validation via MS-experiments and database searches. They will also be responsible of the quality control of the data produced and of the data transfer towards public repositories, in an Open Data context. Knowledge of the Orbitrap spectrometer and/or bidimensional gaschromatography is considered advantageous.
Duties / Tasks	Duties will be, within the projects ENPADASI and FOOTBALL, to perform experiments of untargeted and targeted metabolomics, record data and keep detailed and accurate records, perform the quality control of the data produced, interpret the fragmentation trees and annotate the metabolites, contribute to the improvement of the in-house data pipeline for experiments of metabolomics, data transfer to open repositories selected for the Projects, and to produce regular written reports on the results.
Keywords	Untargeted Metabolomics, Mass Spectrometry, Nutrition, Biomarker identification, Data Sharing.

Recruitment methods	By qualifications (max 30 points) and interview (max 70 points). The results of the recruitment process will be based on the total points obtained as a result of qualifications and performance at the interview.
Subjects covered in the interview, the minimum mark required to pass the individual tests;	<p>During the interview, which will be in English, the knowledge in the following topics will be verified:</p> <ul style="list-style-type: none"> • Mass Spectrometry (up to 15 points, threshold 11); • Strategies for the data analysis in the field of both targeted and untargeted metabolomics of biofluids (up to 15 points, threshold 11); • Statistical modelling and interpretation of metabolomics data (up to 15 points, threshold 11); • Strategies for the structural annotation of metabolites (up to 15 points, threshold 11); • Safety in the chemical laboratory (up to 10 points, threshold 4). <p>The candidate must obtain a minimum mark at the interview of 50/70 Points.</p>
Criteria for the pre-selection	<p>On the basis of the information contained in the <i>curricula</i> or demonstrated by candidates, the best 6 applicants, based on the highest scores obtained following the criteria below, will be selected and admitted to the interview phase (max. 30 point):</p> <ul style="list-style-type: none"> • Post-doc work experience, beyond the experience mentioned in the requirements, in the areas of metabolomics, analytical chemistry, data analysis, mass spectrometry and nutritional biochemistry in highly qualified research institutions or Universities (between 0.5 and 2 points for each year, depending on the relevance of the research activities, up to a maximum of 12 points); • Scientific publications in journals with IF (5 Year Impact Factor) in the field of metabolomics, analytical chemistry, data analysis, mass spectrometry and nutritional biochemistry and to their applications to life sciences (between 0.5 and 2 points for each publication, depending on IF: 0.5 if IF<2; 1 if IF between 2 and 4; 1.5 if IF between 4 and 10; 2 if IF higher than 10; and up to a maximum of 18 points).
Knowledge of languages in the context of the Common European Framework of Reference for Languages (CEFR): level of knowledge and method of ascertainment	<p>Furthermore, knowledge of written and spoken scientific English will also be verified (to be checked by an interview on a subject of a technical or scientific nature) at a minimum level corresponding to C1.</p> <p><i>To understand the levels of knowledge required consult the dedicated page at the EUROPASS site:</i> https://europass.cedefop.europa.eu/it/resources/european-language-levels-cefr</p> <p>Knowledge of English, self-certified in the pre-selection process, will be checked during the interview, as specified above. If it is ascertained that the candidate does not have knowledge of scientific English corresponding with level B1, s/he will be excluded from the recruitment process.</p>
Methods and deadlines for communication of the calendar and location to candidates admitted to the interview/test	<p>Candidates admitted to the interview phase will be informed of the date and location via e-mail (NO PEC), sent to the contact address used to send the curriculum, at least 10 days before the interview date.</p> <p>The interviews will be held at the Fondazione E. Mach in San Michele all'Adige (TN).</p>
Gross annual remuneration	<p>Temporary employee contract "CCPL Fondazioni", Third band Researcher, yearly Euro 38.158,73 including 13° and 14° months.</p>
Deadline for presentation of applications and deadline for the	<p>Applications must arrive by and no later than 23:59 (the date and time of receipt shown in the electronic mail account of the Foundation shall be valid) on June 24, 2016; The recruitment procedure will terminate at the latest by December 24, 2016.</p>

conclusion of the recruitment procedure	
How to present applications	<p>Applications to participate in the selection (professional curriculum vitae and other relevant documentation), must be sent in electronic format to the e-mail address (NO PEC) curricula@fmach.it, indicating the recruitment code in the object of the message (205_CRI_MBM – Temporary metabolomics).</p> <p>The work curriculum must be saved with file extension: Surname Name_CV.doc , or .pdf.</p> <p>In cases of access issues due to disability, please contact the following telephone number +39 0461 615542.</p>
Proof of documentation in the event of hiring and relative deadlines	<p>By at least 10 days before the date of hiring, the candidate must provide the following, on penalty of cancellation:</p> <ul style="list-style-type: none"> • Master of Science in: Chemical sciences (or equivalent); <p>And</p> <ul style="list-style-type: none"> • PhD in Analytical Chemistry (or equivalent).
Results of the selection	<p>The results of the selection will be communicated to the candidates at the end of the recruitment procedure individually via e-mail (NO PEC), sent to the contact address used to send the curriculum.</p>
Hiring conditions and categories covered by Law 68/99	<p>It is underlined that the Fondazione Edmund Mach applies D.lgs. 368/2001, including article 5, paragraph 4 bis, which excludes the possibility of legitimately prolonging or renewing temporary contracts for equivalent roles for more than 36 months. Furthermore, the Foundation reserves the right to carry out appropriate checks in relation to the truthfulness of the information stated in the application and the enclosed curriculum.</p> <p>Finally, candidates are invited to state whether they belong to the categories recognised according to Law 68/99 and indicate this in the curriculum sent to participate in the recruitment process.</p>
Handling of data	<p>The curriculum must include the following phrase, otherwise the candidature will not be taken into consideration: I agree to the handling of my personal data in accordance with D.lgs. 196/2003. The candidate takes full responsibility for all the information included in the application form and curriculum vitae. The Foundation reserves the right to request documentary proof of the qualifications listed by the candidate considered suitable for the post offered.</p>

Before carrying out the tests and/or evaluation interview, the candidate shall be identified and asked to complete a declaration, if this has not already been presented, stating:

- that he has the requirements indicated in the notice;
- that there are no reasons for incompatibility provided for by the law or linked to interests of any kind with reference to the scope of the employment;
- that he has no criminal convictions and is not subject to measures related to the application of prevention measures, civil decisions and administrative provisions registered in the criminal record;
- the truthfulness of the declarations made in the application/ curriculum and an undertaking to communicate any subsequent changes.

For any matters not covered by this recruitment notice, reference should be made to “[Regulations for the recruitment of human resources at the Fondazione Edmund Mach](#)”.