Job description	**Selection code: 236_CRI_TUM**
Type of post and number of positions vacant	**Third level Researcher (R3) in the field of targeted and untargeted metabolomics, analysis of biofluids, applied to human nutrition projects** - Recruiting for the formation of ranking for temporary employee contract.
Organisational structure and manager for the position	Research and Innovation Centre (CRI), Department of Food Quality and Nutrition (DQAN), Unit of Metabolomics. Projects in collaboration with the University of Trento, Center Agriculture Food Environment (CAFE).
Requirements necessary for participation	• Master of Science in: Chemical Sciences or in Health and Nutrition Biology or in Nutrition and Metabolism or in Nutrition and Health Sciences (or equivalent); And • PhD in Analytical Chemistry or in Food and Nutrition or in Agricultural Science and Biotechnology or Biomolecular Sciences (or equivalent); And • At least two years of documented experience in research, acquired after the Master, in metabolomics with autonomous use of LC-MS or NMR instruments and documented experience in method development/validation and data mining. This experience can be included in the PhD activity only if the candidate has worked, during the PhD, in metabolomics with autonomous use of LC-MS or NMR instruments and in method development/validation and data mining; And • Knowledge of written and spoken English (minimum level B2), evaluated during the interview.
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 and observational 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 Bioinformatics and Biostatistics and/or documented experience with High Resolution High Accuracy Hybrid mass spectrometer, and/or Tandem Mass Spectrometer (triple quadrupole) is considered advantageous.
Duties / Tasks	Duties will be, within publicly funded international projects and consortia, 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	Metabolomics, Mass Spectrometry, Human Nutrition, Biomarker identification, Data mining, Data interpretation, 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	During the interview, which will be in English, the knowledge in the following topics will be verified: 1. Mass Spectrometry **(up to 15 points, threshold 11)**; 2. Strategies for the data analysis in the field of both targeted and untargeted metabolomics of biofluids **(up to 15 points, threshold 11)**; 3. Statistical modelling and interpretation of metabolomics data **(up to 12 points, threshold 8)**; 4. Strategies for the structural annotation of metabolites **(up to 13 points, threshold 9)**; 5. Safety in the chemical laboratory (**up to 10 points, threshold 4**); 6. Knowledge of the activities and organization of Fondazione Edmund Mach (up to **5 points**). The candidate must obtain a minimum mark at the interview of **50/70 Points.**
Criteria for the pre-selection	On the basis of the information contained in the *curricula* or demonstrated by candidates, **the best 8 applicants** , based on the highest scores obtained following the criteria below, **will be selected and admitted to the interview phase** (**max. 30 point, threshold 8**): • 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 6 points**); • Scientific publications in journals with IF (**5 Year Impact Factor, please don't forget to add this info in the submitted cv**) 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. Points doubled if first, last or corresponding author**); • Documented (don't forget to specify it in the application!) knowledge of Bioinformatics and Biostatistics and/or documented experience in metabolomics with High Resolution High Accuracy Hybrid mass spectrometer, and/or Tandem Mass Spectrometer (triple quadrupole), **up to a maximum of 6 points.**
Knowledge of languages in the context of the Common European Framework of Reference for Languages (CEFR): level of knowledge and method of ascertainment	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 B2 (preferred C1). *To understand the levels of knowledge required consult the dedicated page at the EUROPASS site:* https://europass.cedefop.europa.eu/it/resources/european-language-levels-cefr 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 B2, s/he will be excluded from the recruitment process.

Methods and deadlines for communication of the calendar and location to candidates admitted to the interview	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. The interviews will be held at the Fondazione E. Mach in San Michele all'Adige (TN).
Gross annual remuneration	Temporary employee contract "CCPL Fondazioni", Third level Researcher, yearly Euro 38,158.73 including 13° and 14° months.
Deadline for presentation of applications and deadline for the conclusion of the recruitment procedure	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 December 3, 2017.** The recruitment procedure will terminate at the latest by June 3, 2018
How to present applications	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 **(236_CRI_TUM – R3 temporary metabolomics)**. The work curriculum must be saved with file extension: **Surname Name_CV.doc , or .pdf**. In cases of access issues due to disability, please contact the following telephone number +39 0461 615542.
Proof of documentation in the event of hiring and relative deadlines	By at least 10 days before the date of hiring, the candidate must provide the following, on penalty of cancellation: - Master of Science certificate; - PhD certificate; - Documented two years experience in research, acquired after the Master, in metabolomics with autonomous use of LC-MS or NMR instruments and documented experience in method development/validation and data mining.
Results of the selection	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. The Foundation will have the right to use the results of the recruitment process **to fill further positions**, also disregarding their placement in relation to specific skills, **in the 36 months following the date on which the recruitment procedure concluded**, so long as there is a link between the post to be filled and the skills ascertained in the recruitment process, and that this does not lead to a more remunerative position than that filled by the winner.
Hiring conditions and categories covered by Law 68/99	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. 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.
Handling of data	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.

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**".

The Director General
Dr. Sergio Menapace