



Organization and Human Resources Division Human Resources Development Office

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Announcement	of available position	Selection code: 368_CRI_PRS
Type of position and number of positions vacant	N.1 (one) temporary PostDoc position (Third level Researcher R3) for 30 months* in the field of Plant RNA-Seq.	
Organisational structure and manager for the position	Research and Innovation Centre – Unit of Ecogenomics – Line Manager for the position: Claudio Varotto. * The position is offered within the BRYOMOLECULES ("Bioprospection and production of bioactive molecules from European bryophytes") project funded by European Union's Horizon Europe from 01/08/2024 to 31/08/2027, CUP D43C24001340002. The duration of the contract is limited to the duration of the project itself. The contract cannot exceed the actual project end date of 31/08/2027 (the duration of the contract will eventually be reduced so as not to exceed the stated date).	
Specific requirements	 PhD in computational biology, computer sciences, synthetic/systems/molecular biology, biology, biotechnology, engineering, physics, biochemistry, mathematics, natural sciences or related field; Knowledge of written and spoken English (B2 level), evaluated during the interview. 	
General requirements	 Italian citizenship with the benefit of full civil and political rights within the State of Italy, whether belonging to the Republic, or not; OR Citizens of European Union Member States or other States, provided they mee the following requirements: benefit of full civil and political rights in the country of origin on ationality (or explanation of the reasons for non-benefit); possession of all the same requirements as for citizens of the Republic with the sole exception of Italian citizenship, as detailed below. Having or not having been the subject of criminal convictions or applications of penalties at their own request (plea bargaining), which have been confirmed a enforceable convictions; Having or not having been the subject of a conviction or any application of penalty at their own request (plea bargaining), which has not yet been confirmed as enforceable, for the offences referred to in Book 2, Title II, Chapter I of the Italian Criminal Code ("Offences committed by public officials against the public administration"); Having or not having been dismissed or declared disqualified from employment for having obtained employment through the production of false documents of documents that are invalid and with no possibility of remedy, or for having carried out activities incompatible with employment relationships with the Public Administration, or with entities governed by private law but under public control; Having or not having exercised authoritative or negotiating powers over the Edmund Mach Foundation (Article 53 paragraph 16 ter of Legislative decreases). Having or not having been dismissed for justified subjective reason nor justicuse, nor having had their employment relationship terminated in application. 	





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	 of Article 32 quinques of the Italian Criminal Code, because of failure to pass the probationary period for an employment relationship of indefinite duration and requiring the same qualifications as for this current recruitment; Being in compliance with any obligations for military service; In the event of recruitment, being available to take service at Edmund Mach Foundation premises.
Physical suitability for the specific work	Edmund Mach Foundation will assess the specific risks connected to the work, and if necessary, request a preventive medical examination, pursuant to art. 41 of Legislative Decree 81/2008, in order to ascertain the physical suitability of the employee and absence of contraindications to the work for which they are to be employed. In case of physical unsuitability or suitability with limitations, the Foundation reserves the right not to proceed with recruitment or to withdraw from the contract if it has already been entered into.
Exclusion from the recruitment process	The following may not participate in the recruitment process: temporary staff who have been employed for the Foundation in an equivalent role for 6 months (36 months).
Job description	The successful candidate will contribute to assembly, annotation and mining of plant transcriptomes obtained from massive RNA-Seq experiments. Comparative transcriptomics approaches will be undertaken to identify candidate genes involved in the biosynthesis of potential biologically active metabolites from bryophytes. We are looking for a highly motivated postdoc to join our group. Candidate selection will be made through an evaluation of experience in RNA-Seq approaches for biosynthetic pathway reconstruction, the quality of publications in areas relevant to the posted research requirements, record of accomplishments entered the candidate's CV, descriptions of research and educational experiences provided in the application materials, and the strength of professional references.
Duties	 Under the supervision of the PI, the selected researcher is expected to perform the following tasks: Assemble and annotate multiple de novo Illumina transcriptomes from non-model and model bryophytes; Carry out gene mining: identify and select candidate genes from transcriptome and metabolome data sets obtained from different bryophyte species; Develop methods for the integration of different data sources aimed at the identification of candidate biosynthetic genes for added value metabolites; Contribute to establish an online database of the major biosynthetic pathways for secondary metabolism in bryophytes; Communicate results to the scientific community through publications and presentations in national and international meetings, possibly mentoring undergraduate students and laboratory technicians, and other related duties as assigned.
Keywords	Comparative transcriptomics, biosynthetic pathway mining, specialized plant metabolites, gene discovery, RNA-Seq, bryophytes.
Selection process	By qualifications as expressed in Annex A (maximum 30 points) and interview (maximum 70 points). The results of the selection are based on the sum of the points awarded for the two phases of the selection process.
Subjects covered in the interview	During the interview, which will be conducted in English, the following knowledge will be verified (maximum 70 points):





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	 Fundamentals in transcriptional profiling, gene discovery and transcriptome annotation in plants, with an overview of the current sequencing technologies and in silico approaches to RNA-Seq data mining (maximum 15 points); De novo Illumina RNA-Seq data analysis: advantages and limitations of existing pipelines and software for assembly, differential expression quantification and functional annotation (maximum 20 points); Approaches for comparative transcriptomics analysis, pathway reconstruction and identification of biosynthetic candidate genes (maximum 20 points); Basic knowledge of RNA-Seq data management and sharing, including F.A.I.R. approaches and database establishment (maximum 10 points); General organisation and activity of FEM, rights, and duties of employees (maximum 5 points).
Assessment of qualifications	Based on the information provided exclusively in the application (Annex A), FEM will select the best 10 candidates evaluated based on the following criteria (maximum 30 points): Relevance of the PhD thesis to the following topics: Plant de novo RNA-Seq (assembly, annotation); Mining of biosynthetic pathways and comparative transcriptomics (maximum 7 points attributed according to the following criteria: 0 points=no match, 1=minimal match, 4=medium match, 7=perfect match); Post-doc work experience in transcriptional profiling with high-throughput sequencing methods (0,3 points for every month of experience up to maximum 10 points); Scientific publications in journals with impact factor in the field of biology, biotechnology, computational biology, metabolic engineering or equivalent (0,5 points per item up to maximum 13 points. The score of the individual publications will be doubled if the candidate appears as first, last or corresponding author).
Knowledge level of languages, relative to the Common European Framework (CEFR), and method of verification	The interview will be in English. Knowledge of English will be verified through the interview and a minimum level of B2 is expected. To understand the levels of knowledge required, consult the dedicated page on the EUROPASS website: https://www.coe.int/en/web/common-european-framework-reference-languages Failure to possess a level of English corresponding to B2 will result in exclusion from the selection process.
Possession of requirements and recourse to clarification	The candidate must meet all the requirements and qualifications laid out, on the closing date for submitting applications as stated in the public announcement, as well as on the date of recruitment and placement. Candidates are in any case required to promptly inform the Foundation of any change in the data declared in the application for participation in the public notice. Failure to meet the specific and general requirements will result in exclusion from the selection process. The Foundation reserves the right to verify the above requirements and may at any time terminate the selection process for a candidate who does not meet them. Should the verification reveal inconsistencies, doubts or uncertainties, the Foundation also reserves the right to request further clarifications





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In the application form (Annex A) the candidate must declare, under their own personal responsibility, the possession of the specific requirements, general requirements and any qualifications as indicated in the relative boxes of this Recruitment Announcement, pursuant to Articles 46 and 47 of Presidential decree no. 445 of 28 December 2000, indicating awareness of the forfeiture of any benefits obtained and the criminal sanctions provided for respectively in Articles 75 and 76 of the aforementioned decree, in the case of untrue declarations, creation or use of false documents. By applying for selection, the candidate assumes responsibility for the truthfulness of all the information provided in the application and in any attached documents, as well as for the conformity to the original of the copies of any documents produced, all this in accordance with Presidential decree 445/2000. The Edmund Mach Foundation reserves the right to carry out checks and if these reveal that the candidate's declarations contain any untrue content, the declarant will forfeit any benefits deriving from any provision issued on the basis of the untruthful declaration; moreover, such a declaration, as a "mendacious statement", will be punished in accordance with the Italian Criminal Code and the special laws on the subject. Candidates who make untruthful declarations concerning the possession of the fundamental requirements for participation in the selection process will be removed from the ranking list and the employment relationship, if already established, will be terminated. The Foundation shall not accept any responsibility for the loss of communications due to the incorrect indication of the address by the candidate or to a missed or late communication of the change of the address indicated in their application, or due to any postal or telecommunications defects or in any case due to third parties, unforeseeable circumstances or force majeure. Proof of documentation Within 10 days prior to hiring, the candidate must provide, under penalty of forfeiture from hiring, the attestations or certifications demonstrating possession of the requisites of admission and qualifications declared in the application form. The results of the selection will be communicated by: publication of the suitable candidate ranking on the webpage dedicated to the present recruiting announcement, with the details of ranking order, surname and name; the publication of the candidate's name in the list of suitable candidates shall not be subject to the right of confidentiality, therefore the candidate may Results of the selection not request that their name be removed from the said list; at the end of the procedure, communication to all candidates, whether included in the ranking of suitable candidates or not, by individual email (not certified email, a.k.a. PEC) to the contact address used to send the curriculum vitae and the application. The Edmund Mach Foundation operates in compliance with the legislation in force

Hiring conditions and categories covered by Law 170/2010 or Law 68/99

in the event of hiring

and relative deadlines

concerning fixed-term contracts.

Candidates are invited to state whether they belong to the categories referred to in Law No. 170 of 8 October 2010 (people with specific learning disorders (SLD)) or in Law No. 68/99 (persons with disabilities or categories referred to in Article 18), and to indicate this in the application form.





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Company welfare and benefits at current date	 Family Audit certified company, with flexible working time and human resources management policy, for the wellbeing of the employees and their families; Gender Equality Plan (GEP) that promotes gender equality through a process of structural change; In-house dining hall in San Michele all'Adige, as well as a payment card for meals taken in registered non-company facilities, with the value of Euro 6.00 per meal; Bike-sharing facility and free car park within the San Michele all'Adige campus and at the peripheral locations; Free "Education Roaming (Eduroam)" WiFi on the San Michele all'Adige campus (90% coverage) and in facilities of other entities affiliated with GARR for the WiFi service; Employee discount for the purchase of products from the Edmund Mach Winery sales point; Staff sports club, with discount for members and promotions of sport-recreational activities (on-campus gym); Internal market of agri-food products prepared by the Foundation students. 	
Privacy Policy	In accordance with Article 13 of the EU General Data Protection Regulation 2016/679 ("GDPR" or "Regulation"), and in general with the principle of transparency set out in the Regulation, the Edmund Mach Foundation provides information on the processing of personal data at the webpage "Privacy Policy". The candidate takes full responsibility for all the information included in their application form and curriculum vitae. The Foundation reserves the right to require that the candidate considered suitable for the post shall offer documentary proof of the qualifications they have listed.	
Funding reference	HE BRYOMOLECULES GA 101135305	

This Recruiting Announcement is issued in compliance with equal opportunities between men and women for access to employment, pursuant to Legislative decree no. 198 of 11 April 2006 "Code of equal opportunities between men and women, pursuant to Article 6 of Law no. 246 of 28 November 2005".

The candidate identifies their gender prior to the tests and/or interview.

For any matters not covered by this Recruitment Announcement, reference should be made to "Procedure for the recruitment of human resources at the Fondazione Edmund Mach".

Original signed by

Eng. Mario Del Grosso Destreri

Director General

Edmund Mach Foundation