





Organization and Human Resources Division Human Resources Development Office

Page 1 of 6

Job description		Selection code: 329_CRI_AGRITECH
Type and number of vacancies	 N. 3 (three) positions of IV level Researcher (R4) with a fixed term duration up to a maximum of 36 months* of the research project in sectors 07 / E1 - Agricultural genetics and 05 / E2 - Molecular biology which includes following sub-projects: Project 1: Molecular characterization of the FEM germplasm in the frame of the construction of a database; Project 2: Study of the molecular mechanisms of resilience to climate change in fruit plants through the integration of multi-omic data and identification of candidate genes; Project 3: Development and application of cisgenesis and genome editing protocols in apple and grapevine for functional characterization of abiotic stress response genes. Selection for the formation of a ranking list for fixed-term recruitment. 	
Funding reference	National Research Centre for A Centri Nazionali PNRR - Missione 4: Istruzione e Componente 2: Dalla ricerca al Investimento 1.4, finanziato da Progetto CN_00000022 – A - Spoke 1 CUP D43C22001220006 Avviso MUR 3138 (16/12/2021	Agricultural Technologies (Agritech) e Ricerca Il'impresa all'Unione europea - Next Generation EU area Tematica: Tecnologie dell'Agricoltura (Agritech) cione del finanziamento n. 1032 (17/06/2022)
Job location with the Fondazione and general manager of the position	Centre for Research and Innov * The duration of the contract specific research project and i	ation (CRI). Director: Prof. Mario Pezzotti. is limited to the completion of activities pertinent to the in any case to the research project itself. Therefore, the e contracts cannot extend beyond the end of the research
Minimum requirements for submitting an application	Biotechnology or equivale	cultural Sciences and Technologies, Molecular Biology, nt;







Organization and Human Resources Division Human Resources Development Office

Page 2 of 6

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	 Project 1: Genetic analysis of germplasm collections, including improvement materials for traits of sustainable quality, oriented to the development of FAIR databases; Project 2: Identification of the molecular basis of resilience to climate change in fruit plants through the integration of multi-omics data; Project 3: Development of cisgenesis and genome editing protocols to obtain materials resilient to abiotic stresses and for the functional study of the cuticle.
	The identified human resources will provide, under the supervision of the PIs of the project, the following skills:
	 Project 1: Molecular characterization of the FEM germplasm in the frame of the construction of a database; Project 2: Study of the molecular mechanisms of resilience to climate change in fruit plants, through the integration of multi-omic data and identification of the candidate genes; Project 3: Development and application of cisgenesis and genome editing protocols in apple and grapevine for the functional characterization of abiotic stress response genes.
Tasks	 Project 1: Genotyping analysis by SNP array; kinship studies and core-collection identification; digitization of data and metadata; drafting and submission of manuscripts; Project 2: Analysis of transcriptomics data obtained from sequencing of RNA-seq libraries and integration with genomics studies; drafting and submission of manuscripts; Project 3: Transformation of grapevine and apple trees with constructs for cisgenesis and genomic editing; preparation of protoplasts and their transfection with DNA, RNA and proteins; regeneration of plants and functional tests; cuticle analysis; drafting and submission of manuscripts.
Keywords	 Project 1: Genotyping; molecular markers; SNP array; phenotyping; database; fruit plants; Project 2: Genomics; transcriptomics; metabolomics; data integration; fruit plants; Project 3: Cis-genesis; genome editing; protoplasts; abiotic stress; cuticle; fruit plants.
Selection process	A maximum of 30 points will be allocated for qualifications while the interview will be worth up to 70 points . The recruitment process will be based on the total points obtained through qualifications and performance at the interview, the results of which will be used to generate a short list for each subproject . The candidate should indicate which project(s) they are applying to as they will be evaluated for inclusion in the relevant ranking(s) of these. At the discretion of the Foundation, (see "Procedura per la selezione delle risorse umane presso la Fondazione Edmund Mach"), candidates may be drawn from one subproject short list for another short list if there are no suitable candidates or no suitable candidate accepts the job offer for that subproject.







Organization and Human Resources Division Human Resources Development Office

Page 3 of 6

The interview, which will be held in English, will include a brief presentation of the candidate's education, work experiences, ambitions and knowledge in the following areas (maximum 70 points):

- <u>Project 1</u>: Genetics and genomics, marker-assisted selection, with particular reference to grapevines, apples and berry fruits;
- <u>Project 2</u>: Genomics, transcriptomics and metabolomics, with particular reference to grapevines, apples and berry fruits;
- <u>Project 3</u>: New breeding technologies for functional genomics studies in grapevine and apple trees: methods for obtaining edited and cisgenic plants and for their characterization.

Subjects covered by the interview

Evaluation criteria for the interview:

Scores will be assigned to candidates by the Commission according to the following criteria: up to a maximum of 20 points will be attributed to the presentation by the candidate of their personal research profile (0-5 points: vague and not very articulated; 5-15 points: informative, well-articulated and effective; 15-20 points: extremely effective presentation); up to 50 points will be attributed to the interview on the subproject(s) selected by the candidates by assessing the candidate's knowledge of the subjects indicated above for each project (0-10: poor knowledge of the relevant topics and limited ability to communicate orally; 10-20: limited knowledge of some topics with sufficient ability to communicate orally; 20-30: knowledge of most topics and moderate ability to communicate orally; 30-40: good overall knowledge of the topics and strong oral communication ability; 40-50: excellent knowledge of the topics with very strong oral communication ability).

The evaluation will be expressed in points only and the candidate must reach a minimum evaluation at the interview of 40/70 points to be ranked in the shortlist.

On the basis of the information contained in the application form (please use the form available on the web page of this announcement), integrated at the discretion of the Commission contained in the curriculum vitae, candidates with a minimum score of 10 out of **30 points** will be admitted to the interview phase. The evaluation of qualifications will be as follows:

- Research experience (including the PhD period) in the grapevine, apple and berry fruit <u>species</u> (1 point per year up to a maximum of 5 points);
- Use of nucleic acid analysis <u>software</u>, with particular reference to the following <u>topics</u>: genetic diversity studies, genotype-phenotype association or gene expression analysis (1 point for each software up to a maximum of 4 points);
- Scientific publications with Impact Factor (IF) on ISI-JCR journals in the last 10 years (from 2013): for each publication calculate and report the product (score) between the journal's IF (of the publication year) and the coefficient of the author's position (0.7 if first, last or corresponding author 0.3 if other position, up to a maximum of 10 points);
- <u>Scientific publications (non-popular) without IF</u> (conference abstracts, proceeding, book chapters) on grapevine, apple or berry fruits (0.5 points per contribution, up to a maximum of 4 points);

Pre-selection criteria and evaluation of qualifications







Organization and Human Resources Division Human Resources Development Office

Page 4 of 6

	 Recognitions/awards as the best contribution (poster/oral) to a national or international conference in the sectors 07 / E1 - Agricultural genetics and 05 / E2 - Molecular biology (1 point for awarded contribution up to a maximum of 2 points); Involvement (drafting of the project or participation in progress meetings or participation in drafting reports) in national/international projects in the sectors 07 / E1 - Agricultural genetics and 05 / E2 - Molecular biology (1 point per project up to a maximum of 2 points). 	
Language assessment according to the Common European Framework of Reference for Languages (CEFR): level of knowledge	Knowledge of English will be verified at interview on a technical or scientific topic and must be equal to or exceed level B2. Definitions of levels can be found at the following link: https://www.coe.int/en/web/common-european-framework-reference-languages If during the interview it is ascertained that the candidate does not possess the	
required Date of interview	knowledge of English at the minimum level, they will be excluded from the selection. Candidates admitted to the interview phase will be invited at the Fondazione E. Mach at San Michele all'Adige (TN) or via videoconference on October, 7, 2022.	
Gross annual remuneration	Contract type: CCPL Research Foundation Personnel (https://trasparenza.fmach.it/Amministrazione-Trasparente/Personale/Contrattazione-collettiva/CCPL-Personale-Fondazioni-di-Ricerca): for a fourth level Researcher, the current gross annual remuneration is Euro 34,563.94.	
Deadline for presentation of applications and deadline for the conclusion of the recruitment procedure	Applications must be received no later than 11:59 pm (the date and time of receipt indicated in the Foundation's e-mail account will be taken as proof) on September 22, 2022. The recruitment procedure will be completed by March 22, 2023 at the latest.	
How to submit an application	Applications to participate in the selection must be sent in electronic format to the email address (not certified email address, a.k.a. PEC) curricula@fmach.it , indicating the recruitment code (329_CRI_AGRITECH – R4) in the subject of the message and must consist of: - the application form (Annex A), using the form available on the webpage announcement: this should be saved with the file name and extension: Surname First Name _Application.pdf. The application must be completed in full, with no references to other attached documentation and/or information; - the candidate's curriculum vitae, saved with the file name and extension: Surname First Name_CV.doc or .pdf; - a copy of a valid identity document with photograph. Any person encountering difficulty in submitting the application due to disability is invited to contact +39 0461 615542.	
Proof of documentation required for hiring and relative deadlines	At least 10 days before the start date of the non-permanent contract, the candidate must provide the following original document, or the offer will be cancelled: • Master of Science (or equivalent) certificate.	
Results of the selection process	The results of the selection will be communicated by: - publication of the shortlist of suitable candidates on the webpage dedicated to the present recruiting announcement, with the details of rank, surname and name; the publication of the candidate's name in the list of suitable candidates is not subject	







Organization and Human Resources Division Human Resources Development Office

Page 5 of 6

	to confidentiality regulations; therefore, the candidate can not request that their		
	name be removed from this list;		
	- at the end of the selection procedure, all candidates will be notified by individual		
	email (not certified email, a.k.a. PEC) as to whether they are included in the shortlist		
	of suitable candidates or not; this email will be sent to the contact address used by		
	the candidate to send their curriculum vitae and the application.		
Hiring conditions and categories covered by Law 68/99	The Fondazione E. Mach operates in compliance with current legislation concerning		
	fixed-term contracts.		
	Candidates are invited to state whether they belong to the categories referred to in Law		
	68/99, and to indicate this in the curriculum vita sent in application for recruitment.		
	1. <u>Family Audit</u> certified company, with flexible working time and human resources		
	management policy, for the wellbeing of the employees and their families;		
	2. <u>Gender Equality Plan (GEP)</u> that promotes gender equality through a process of		
	structural change;		
	3. In-house dining hall and coffee shop in San Michele all'Adige, as well as a <u>payment</u>		
	card for meals taken in registered non-company facilities, with the value of Euro		
	6.00 per meal;		
Company	4. <u>Bike-sharing</u> facilities and free car park within the San Michele all'Adige campus and		
welfare and benefits at	at peripheral locations;		
current date	5. 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 Wi-Fi		
	service;		
	6. Employee discount for the purchase of products from the Edmund Mach Winery		
	sales point;		
	7. <u>Staff sports club</u> , with discount for members and promotions of sport-recreational		
	activities (on-campus gym);		
	8. Internal market of agri-food products prepared by FEM highschool 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 this		
	Regulation, the Fondazione E. Mach provides information on the processing of personal		
	data on the webpage "Privacy Policy".		
	The Foundation reserves the right to request documentary proof of the		
	qualifications listed by the candidate considered suitable for the post offered.		
	The candidate takes full responsibility for all information included in the application form		
	and in their curriculum vitae. The Foundation reserves the right to require that the		
	candidate considered suitable for the post provides documentary proof of the		
	qualifications they have listed.		







Organization and Human Resources Division Human Resources Development Office

Page 6 of 6

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

Furthermore, the recruiting process will be performed considering the targets set out by article 7 ("Criteri di ammissibilità") of the following public call of the Italian Ministry of University and Research: "Avviso pubblico per la presentazione di Proposte di intervento per il Potenziamento di strutture di ricerca e creazione di "campioni nazionali" di R&S su alcune Key Enabling Technologies da finanziare nell'ambito del Piano Nazionale di Ripresa e Resilienza, Missione 4 Componente 2 Investimento 1.4 "Potenziamento strutture di ricerca e creazione di "campioni nazionali di R&S" su alcune Key Enabling Technologies" finanziato dall'Unione europea – NextGenerationEU".

The candidate may identify 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" (available only in Italian);
- "Avviso pubblico per la presentazione di Proposte di intervento per il Potenziamento di strutture di ricerca
 e creazione di "campioni nazionali" di R&S su alcune Key Enabling Technologies da finanziare nell'ambito
 del Piano Nazionale di Ripresa e Resilienza, Missione 4 Componente 2 Investimento 1.4 "Potenziamento
 strutture di ricerca e creazione di "campioni nazionali di R&S" su alcune Key Enabling Technologies"
 finanziato dall'Unione europea NextGenerationEU" (available only in Italian).

Original signed by Ing. Mario Del Grosso Destreri Director General Fondazione E. Mach