

MED – Mediterranean Institute for Agriculture, Environment and Development

MsC Level Research grant (BI) -1 vacancy Ref.^a BioGrapeSustain Biotechnology

 26^{TH} of October of 2022

A call for tenders is open for 1 Scholarship (Msc level) within the scope of the project "Vine&Wine - Driving Sustainable Growth Through Smart Innovation" (subproject – BioGrapeSustain), ref.ª cand67-ACC02/CO5-i01/2022, supported by the PRR - Recovery and Resilience Plan and by the European NextGeneration EU Funds, within the scope of the "Mobilizing Agendas for Reindustrialization" under the following conditions:

Scientific area: biochemistry

Admission requirements:

Bachelor's and Master's in Biochemistry or similar. Laboratory work/research experience. Work experience and/or research related to viticulture/enology. Experience in research work involving molecular biology techniques.

As set forth FCT Research Scholarship Regulation No. 950/2019 of December 16, 2019, article 3 and 6, candidates for "**BI**" (Research Grants) must comply as a rule condition for the award of the scholarship, the effective inclusion in study cycles leading to the attribution of academic degrees or in courses not leading to an academic degree. Courses that do not confer an academic degree correspond to the courses provided for in subparagraph e) of paragraph 3 of article 4 of Decree-Law No. 74/2006 of 24 March and must be developed in a higher education institution in association with at least one R&D unit, including a course plan in one or several research areas of the unit.

Work plan:

The Work Plan for this research fellowship consists:

- 1 Extraction of total RNA and miRNA for RNAseq analysis.
- 2 Identification of differentially expressed transcripts and its validation through RT-qPCR.
- 3 Establishment of a protocol for proteome extraction from leaves/fruits for identification of proteins associated with plant response upon abiotic stresses.

4 – Validation of the results achieved at protein level by Western blot analysis.

5 – Extraction of metabolome and identification of the metabolites involved in plant plasticity upon abiotic stress factors.

6 – Establishment of a somatic embryogenesis protocol for functional validation through genetic transformation mediated by *Agrobacterium tumefaciens*.

7 – Writing of articles and dissemination of the results achieved.

The final objective of this work is a characterization of the molecular mechanisms involved in differential response upon abiotic stresses aiming to contribute to an efficient selection of high resilient cultivars, well adapted to environmental constrains.

Applicable legislation and regulations: The granting of the Research Scholarship will be carried out upon the signing of a contract between the University of Évora and the scholarship holder, as set in the template https://www.fct.pt/apoios/Minuta_Contrato_Bolsa.docx, pursuant to the Research Scholarship Statute (Law No. 40/2004 of August 18 and Decree-Law No. 123/2019 of August 28) and in accordance with the legislation and Regulation of Research Grants of the Foundation for Science and Technology, IP in force, regulation nº950/2019 of December 16, 2019: https://www.fct.pt/apoios/bolsas/regulamento.phtml.pt and other applicable rules.

Place of work: The work will be developed at Laboratory of Molecular Biology of MED, University of Évora, under the scientific guidance of the Professor Hélia Cardoso.

Duration of the scholarship(s): The scholarship will have a duration of 6 months, starting on January of 2023. The scholarship contract may be renewed until the end of the funding project's budget allocation.

Amount of monthly maintenance allowance: The amount of the scholarship corresponds to €1144,64, according to the table of scholarships awarded directly by FCT, I.P. in Portugal (http://fct.pt/apoios/bolsas/valores), payments being made monthly, by check or bank transfer.

Selection methods: The selection methods to be used will be the following:

- curriculum evaluation, 40%
- interview, 40%
- professional experience in the area of viticulture, 20%

Composition of the Selection Jury:

President: Professor Maria João Cabrita Effective member – Professor Raquel Garcia Effective member – Professor Hélia Cardoso Alternate member – Professor Maria do Rosário Félix Alternate member – Professor Ana Elisa Rato Advertising/notification of results: The results of the evaluation will be publicized, through an alphabetically ordered list posted in a visible and public place of MED, being the candidate (a) approved notified through email.

To ensure the right of prior hearing of interested parties, the Final Classification project will be announced by any written means to all interested parties.

After communicating the provisional list of the results of the evaluation, candidates have a period of 10 working days to express their opinion in a preliminary hearing of interested parties.

Application deadline and submission of applications: The tender is open from 2nd of November of 2022 to 16th of November of 2022 and the results of the selection will be published by 21th of November of 2022.

Applications must be formalized, obligatorily, by sending an application letter with the following documents: Curriculum Vitae, certificate of qualifications, 2 reference or recommendation letters and a motivation letter.

For the purposes of application, the evidence may be replaced by a declaration of honor signed by the candidate, but the failure to demonstrate that evidence, in the contracting phase, possession of the required degree on the deadline for application or the non-presentation of proof of enrollment in the study cycle or non-degree course, for scholarships with this component, imply the cancellation of the candidate's application.

Academic degrees obtained in foreign countries require registration by a Portuguese Institution in accordance with Decree-Law no. 66/2018, of August 16 and Ordinance No. 33/2019, of January 25th. The presentation of the certificate is mandatory for the signing of the contract.

More information can be obtained at:

https://www.dges.gov.pt/pt/pagina/recognition?plid=374

Applications must be sent by e-mail, with the reference "Vine&Wine sub-project BioGrapeSustain Biotech" in the Subject field to:

Professor Maria João Cabrita MED, Universidade de Évora e-mail: <u>mjbc@uevora.pt</u>



