

Research Studentships (for students of a course that does not award an academic degree or *PhD student*)

Applications are open for 1 Research Studentship(s), within the framework of project/R&D institution OptiBioScaffold, PTDC/EME-SIS/4446/2020 financed by national funds through FCT/MCTES (PIDDAC), under the following conditions:

Scientific Area: Mechanical Engineering and Systems Engineering

Admission Requirements: Master's in Biotechnology or related fields. Experience in mesenchymal cell culture and hydrogels, nanoparticle formulation, and development of controlled drug delivery systems for cartilage regeneration, as well as experience in characterization of biomaterials, namely rheology, cyclic voltammetry, spectroscopy and liquid chromatography analysis.

According to Article 6 of FCT Regulation for Research Studentships and Fellowships (Reg. nr. 950/2019), at the date that the scholarship contract signing: *a) to hold a bachelor or master degree and be enrolled at a course that does not award an academic degree and it is integrated in the educational project of a higher education institution, performed in association or cooperation with one or several R&D units, or in option to be enrolled on a PhD programme;* *b) not to exceed with this contract, including the possible renovations, an accumulated period of two years in this type of studentship, continuously or with interruptions.*

Workplan: The work plan aims to implement the OptiBioScaffold project. The objectives of this work plan include: (i) Design, produce and characterize new scaffolds; (ii) Evaluation of the behavior of mesenchymal cells cultivated in isolated or simultaneous application of different types of stimulation. The tasks envisaged are aligned with the the studies at which the candidate is, or will be, enrolled.

Legislation and Regulations: Statute of Scientific Research Fellow, approved by Law nr. 40/2004, of August 18, as worded by Decree-Law nr. 123/2019, of August 28; FCT Regulation for Research Studentships and Fellowships, available on <https://www.fct.pt/apoios/bolsas/docs/RegulamentoBolsasFCT2019.pdf> and <https://dre.pt/application/file/a/127230968>.

Workplace: The work will be developed at Stem Cell Engineering Research Group (SERG) of the Institute for Bioengineering and Biosciences of the Instituto Superior Técnico, Campus Tagus Park e Alameda, Lisboa, under the scientific supervision of Frederico Castelo Alves Ferreira and Doutor João Carlos Fernandes da Silva.

Duration: The research fellowship(s) will have the duration of 6 months. It's expected to begin in February 2023, and may be eventually renewed up to the end of the project.

Monthly maintenance allowance: According to the values for Research Fellowships awarded by FCT in Portugal (<http://www.fct.pt/apoios/bolsas/valores>), the amount of the monthly maintenance allowance is € 1 144.64, being the payment method an option of the Fellow by Wire Transfer/Check.

Selection methods: The selection methods will be the following: Curricular evaluation and experience within the scope of the topic of this project (35%), scientific merit and capacity for innovation expressed in the expression of interests presented in the application (35%). Candidates will be interviewed (to be carried out in person or over the phone or through an online video conference platform) and the professional and behavioural skills evidenced in the interview will also be the basis of the assessment in the interview (30%). Candidates will be ranked on a scale of 1 to 20 points for each selection method considered.

Composition of the selection Jury: Frederico Castelo Alves Ferreira, Joaquim Manuel Sampaio Cabral, João Carlos Fernandes da Silva.

Announcement/ notification of the results: The final evaluation results will be communicated to all applicants by email.

Deadlines and procedures of complaint and appeal. A complaint may be lodged from the final decision within 15 working days, or an appeal to the Executive Board of IST-ID within 30 working days, both counted from the respective notification

Application deadline and formalization: The call is open from January 20 until February 2, 2023.

It is mandatory to formalize applications with the submission of the following documents: i) B1 Form – Fellowship application (<https://ist-id.pt/concursos/bolsas/>); ii) *Curriculum Vitae*; iii) academic degree certificate, where applicable; iv) proof of enrollment at a course that does not award an academic degree; v) motivation letter; vi) expression of interests, and vii) declaration on honour that the applicant does not exceed with this contract an accumulated period of two years in this type of studentship, continuously or with interruptions.

Applications must be submitted to the email: frederico.ferreira@tecnico.ulisboa.pt