

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

Applications are open for 1 Research Studentship(s), within the framework of project/R&D institution InSilico4OCReg “In silico models guiding in vitro biophysical stimulation of biomimetic hierarchical scaffolds: a computational modelling approach towards functional osteochondral regeneration”, PTDC/EME-SIS/0838/2021 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 and be enrolled at a course that does not award an academic degree. Experience in the electrical stimulation of mesenchymal stem/stromal cells (MSCs) derived from bone marrow or periodontal tissues. Knowledge on the isolation, culture and osteogenic differentiation of stem cells.

Workplan: The work plan aims to implement the InSilico4OCReg project. The objectives of this work plan include: (i) Design, produce and characterize new electroconductive scaffolds; (ii) Evaluation of the behavior of mesenchymal stem/stromal cells cultivated in isolated or simultaneous application of different types of mechanical and electrical stimulation. The tasks envisaged are aligned with 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 the Institute for Bioengineering and Biosciences of the Instituto Superior Técnico, Campus Tagus Park e Alameda, Lisboa, under the scientific supervision of Doctor Joao Carlos Silva and Prof Frederico Castelo Alves Ferreira.

Duration: The research fellowships will have the duration of 6 months. It's expected to begin in April 2025, and may be eventually renewed up to the end of the project, with the limit of 12 months, including the duration of the initial contract.

Monthly maintenance allowance: According to the values for Research Fellowships awarded by FCT in Portugal (https://www.fct.pt/wp-content/uploads/2025/02/Tabela_valores_SMM_2025.pdf), the amount of the monthly maintenance allowance is €1309,64, being the payment method of the Fellow by wire transfer.

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: Professor Frederico Castelo Alves Ferreira, Dr Paola Sanjuan Alberte and Dr Nuno Ricardo Torres Faria.

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 within 30 working days, both counted from the respective notification.



Fundação
para a Ciência
e a Tecnologia

Application deadline and formalization: The call is open from March 27 until April 9, 2025.

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, iv) proof of enrollment at a course that does not award an academic degree; v) motivation letter; vi) expression of interests, 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, with carbon copy to isamar@tecnico.ulisboa.pt



Fundação
para a Ciência
e a Tecnologia