

(BL82/2025-IST-ID)

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

Applications are open for one Research Studentship(s), within the framework of project/R&D institution, I&D LA i4HB, 1801P.01140 (thematic line: TL2 – Advanced Diagnostics and Therapies), by national funds through FCT/MCTES (PIDDAC):

**Scientific Area:** Stem cell Bioengineering / Biomedicine

**Admission Requirements:** Master's degree in Biomedical Engineering or related fields and be enrolled at a course that does not award an academic degree. Experience in cancer cell culture, bioprinting, and formulation and characterization of bioinks, including mechanical properties, rheology, and cellular characterization.

**Workplan:** Develop advanced in vitro platforms that combine colorectal cancer (CRC) cells with models of healthy and pathological gut microbiota using bioprinting technologies. The objectives of this work plan include:

- (i) Culturing and characterizing CRC cells;
- (ii) Evaluating CRC cell proliferation, invasion, aggressiveness, and chemotherapy resistance in the presence of gut microbiota under static 2D conditions;
- (iii) Formulating bioinks and bioprinting CRC cells.

The work will be carried out within the activities of the Stem Cell Engineering Research Group (SCERG) — focusing on the area of Devices and Materials Engineering for Sustainability and Health at the Institute for Bioengineering and Biosciences (iBB) and INESC-MN, institutions that are part of the Associated Laboratory "Institute for Health and Bioeconomy" (i4HB).

**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 carried out at the Institute for Bioengineering and Biosciences of the Association of Instituto Superior Técnico for Research and Development (IST-ID), under the scientific supervision of Dr. Paola Sanjuan Alberte.

**Duration:** The research fellowship(s) will have the duration of 6 months. It's expected to begin in April 2025 and may be eventually renewed up to the maximum 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](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 to be used are as follows: Curriculum evaluation (30%), experience related to the project's topic (50%), and motivation letter (20%).

Pre-selected candidates may be interviewed to clarify certain aspects of their CV or previous experience. In this case, the selection will be based on the professional and behavioral skills demonstrated during the interview.

Candidates will be scored on a scale from 1 to 100 points for each evaluated criterion.

**Composition of the selection Jury:** Prof. Mário Nuno Berberan e Santos, Prof. Cláudia Lobato da Silva e Dr. Paola Sanjuan Alberte.

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



Fundação  
para a Ciência  
e a Tecnologia

**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.

**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, where applicable; iv) proof of enrollment at a course that does not award an academic degree; v) motivation letter; vi) 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: [paola.alberte@tecnico.ulisboa.pt](mailto:paola.alberte@tecnico.ulisboa.pt) and [Mafalda.firmino@tecnico.ulisboa.pt](mailto:Mafalda.firmino@tecnico.ulisboa.pt)



Fundação  
para a Ciência  
e a Tecnologia