

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 BIOMIMIC-CRC, (2023.13896.PEX), financed by national funds through FCT/MCTES through national funds.

Scientific Area: Biomedicine

Admission Requirements: Master's degree in biotechnology or related fields. Experience in cancer cell culture, bioprinting, and formulation and characterization of bioinks and cellular characterization.

According to Article 6 of FCT Regulation for Research Studentships and Fellowships (Reg. nr. 950/2019), the candidate must, at the time of signing the scholarship contract:

- a) 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;
- 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: 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)

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 December 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/fct-atualizou-o-valor-das-bolsas-para-2025/>), the amount of the monthly maintenance allowance is € 1309,64, being the payment method an option of the Fellow by Wire Transfer/Check.

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 Frederico C Ferreira, Dr Joao C Silva and Dr Teresa Esteves

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 November 6 until November 19, 2025.

It is mandatory to formalize applications with the submission of the following documents: i) B1 Form – Fellowship application (<https://ist-id.pt/recursos-humanos/bolseiros/#documentos-relacionados>); 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: frederico.ferreira@tecnico.ulisboa.pt and isamar@tecnico.ulisboa.pt



Fundação
para a Ciência
e a Tecnologia