

(BL96/2022-IST-ID)

Scientific Initiation Studentships

Applications are open for one Scientific Initiation Studentships, within the framework of project HemoControl, reference PTDC/MAT-APL/7076/2020, financed by national funds through FCT/MCTES (PIDDAC), under the following conditions:

Scientific Area: Mathematics /Numerical Analysis, Optimization and Mathematical Modeling

Admission Requirements:

- a) *To be enrolled at a professional higher technical course, at a bachelor degree, at an integrated master or master degree, or to have a bachelor 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 one year in this type of studentship, continuously or with interruptions;*
- c) *not to have held any other fellowship directly or indirectly funded by FCT.*

Workplan: The research goal is to perform the processing of medical images from the aorta in order to obtain, on the one hand, a computational domain representing the aortic artery and, on the other hand, computational flow representations able to be used in computational fluid dynamics analysis. Computational tools such as ITK-Snap, Gmsh, Meshlab, Openfoam and SimVascular.

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 Center for Computational and Stochastics Mathematics, of Instituto Superior Técnico, under the scientific supervision of Jorge Tiago.

Duration: The research fellowship will have the duration of 3 months. It's expected to begin in June 2022, and may be eventually renewed up to the maximum of 6 months.

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 €486,12, being the payment method an option of the Fellow by Wire Transfer/Check.

Selection methods: The selection methods will be the following: *Curriculum evaluation with a weight of 70%; demonstration of experience/knowledge about the software and/or techniques mentioned in the workplan, with a weight of 30%.*

Composition of the selection Jury: Jorge Tiago, Adélia da Costa Sequeira, Ana Leonor Silvestre.

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 May 30 until June 14, 2022.

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 an academic degree course or 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, including the possible renovations, an accumulated period of one year in this type of studentship, continuously or with interruptions, and has not held any other fellowship directly or indirectly funded by FCT.

Applications must be submitted to the email: jorge.tiago@tecnico.ulisboa.pt