

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

Applications are open for **1 Research Studentship**, within the framework of project **Models4Invasion/CEMAT, (2022.03060.PTDC)**, financed by national funds through FCT/MCTES (PIDDAC), under the following conditions:

Scientific Area: Scientific Computing, Bioinformatics, Applied Mathematics or Applied Mathematics

Admission Requirements:

a) to hold a bachelor or master degree in Computer Science and Engineering, Electrical and Computer Engineering or Engineering Physics, 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: The fellowship goal is to develop, optimize, and deploy robust computational frameworks that enable large-scale biological data analysis through reproducible bioinformatics workflows, high-performance computing (HPC), software engineering best practices, and sustainable research infrastructure. The candidate will:

- Analyze large-scale omics datasets (genomics, metagenomics) relevant for the research project.
- Develop statistical and computational approaches for biological data interpretation.
- Implement scalable data processing strategies for high-throughput sequencing data.
- Generate reproducible analytical reports and biological insights.
- Deploy and optimize workflows on HPC clusters in Linux environments.
- Improve computational efficiency through parallelization and resource optimization.
- Develop best practices for job scheduling, monitoring, and resource utilization.
- Support large-scale data processing using distributed computing technologies.
- Strengthen computational infrastructure supporting bioinformatics research.
- Develop shared tools, templates, and environments for the research team.

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://dre.pt/application/file/a/127230968> .

Workplace: The work will be developed at Center for Computational and Stochastic Mathematics (CEMAT) of Instituto Superior Tecnico, under the scientific supervision of Erida Gjini and Jorge Tiago.

Duration: The research fellowship(s) will have the duration of 3 months. It's expected to begin in 01/09/2026, and is renewable

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-2026/>), the amount of the monthly maintenance allowance is €1359,64, being the payment method an option of the Fellow by Wire Transfer/Check.



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Selection methods: The selection methods will be the following: *Curriculum evaluation and background compatibility with research tasks (40%), individual interview (40%), Reference letter(s) 20%.*

Composition of the selection Jury: Dr. Erida Gjini, Dr. Jorge Tiago, Dr. Conceicao Amado,

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 July 20 until July 31, 2027.

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, vii) example of previous experience or portfolio in the area of this call, vii) at least two reference letters to support the candidate application.

Applications must be submitted to the email: erida.gjini@tecnico.ulisboa.pt



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