

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 HADEA - WW/2024/OP/0017/Laboratório de Análises, 1018P.06783.1.01, financed by HADEA:

Scientific Area: Biological Sciences

Admission Requirements:

a) to hold a 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;

Workplan: With the aim of understanding the presence and spread of emerging and pathogenic contaminants, including enteric viruses and antibiotic-resistant bacteria, which have the potential to assess population health, various techniques will be used, including culture and molecular biology. Wastewater samples of wastewater treatment plants, hospitals, nursing homes, airplanes, and airports will be collected to achieve the final objectives. The study plan is summarized in the table below:

Task	Objective	Month
1.1	Evaluation of various techniques for concentrating different targets in wastewater samples	11
1.2	Comparison of digital PCR, real-time PCR, and high-throughput PCR	11
1.3	Understanding the occurrence of antibiotic resistance and various pathogens in wastewater	11
1.4	Validation of normalization factors	11

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; IST Regulation of Scientific Research Fellowships, available on https://drh.tecnico.ulisboa.pt/files/sites/45/despacho_8532_regulamento_bolsas.pdf.

Workplace: The work will be developed at Laboratório de Análises do Instituto Superior Técnico, under the scientific supervision of Sílvia Patrícia Nunes Monteiro, PhD

Duration: The research fellowship(s) will have the duration of 11 months. It's expected to begin in October 2025, and may be eventually renewed up to the maximum of 12 months, including the duration of the initial contract.

Monthly maintenance allowance: the amount of the monthly maintenance allowance is € 1428,7, being the payment method of the Fellow by Wire Transfer.

Selection methods: The selection methods will be the following: *Curriculum evaluation, individual interview*. The individual interview will be conducted only with the two candidates who receive the highest curriculum evaluation., with the respective weight of 60 % for the curriculum evaluation and 40% for the individual interview.

Composition of the selection Jury: Sílvia Patrícia Nunes Monteiro, Ricardo Jaime Pereira Rosário dos Santos, Filipa Alexandra Borges Novo Macieira

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, or an appeal to the Executive Board of IST, within 15 working days counted from the respective notification.

Application deadline and formalization: The call is open from September 15 until September 19, 2025.

It is mandatory to formalize applications with the submission of the following documents: i) B1 Form – Fellowship application (<http://drh.tecnico.ulisboa.pt/bolseiros/formularios/>); ii) *Curriculum Vitae*; iii) academic degree certificate, where applicable; iv) proof of enrollment at a course that does not award an academic degree;

Applications must be submitted to the email: silvia.monteiro@tecnico.ulisboa.pt; ricardosantos@tecnico.ulisboa.pt