



## ANNOUNCEMENT OF AN INTERNATIONAL CALL FOR THE SELECTION OF A PhD HOLDER RESEARCHER

**Internal code: Researcher/FCT\_Proj2022/i3S/1107/2024**

A call is opened for the position of a PhD holder, for an unfixed term work, to carry out research duties within the project "MRD-on-chip: Exploring the emergence of minimal residual disease and relapse in Acute Myeloid Leukaemia", with reference 2022.05195.PTDC, funded by Fundação para a Ciência e Tecnologia IP.

**Scientific Area:** Bioengineering

### 1. Project summary and work plan

Title: "MRD-on-chip: Exploring the emergence of minimal residual disease and relapse in Acute Myeloid Leukaemia"

The aim of the project is to i) provide a comprehensive understanding on the emergence of MRD during AML chemotherapy ii) dissect underlying roles of biochemical/mechanical cues from distinct bioengineered bone marrow compartments on leukemic cell dynamics; and iii) interrogate the impact of niche signalling networks on LSC survival, progression and dormancy.

The work will be carried out within the scope of Tasks 3, 4 and 5 of the project. Specific goals include integration of vascularized niche microtissues within custom-made microfluidic technology; dynamic tracking of leukemic cell behaviour in distinct BM niches; and determination of the extracellular signalling mechanisms involved in niche-mediated LSC drug resistance.

### 2. Applicable Portuguese legislation

Decree-Law 57/2016 and Portuguese Labor Code, in its current wording.

### 3. Jury

Chairman: Cristina Barrias; Other Members: Sílvia Bidarra, Estrela Neto; Substitutes Christiane Salgado, Sílvia Ferreira.

### 4. Workplace

i3S - Rua de Alfredo Allen, 208 Porto, research group Bioengineered 3D Microenvironments.

### 5. Professional category and monthly remuneration

Junior Researcher

€2.294,95, corresponding to index 33 of the Tabela Remuneratória Única, whose application is intended for PhD holders with reduced post-doctoral experience.

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## 6. Obligatory requirements for admission

### Obligatory:

1. PhD degree in Bioengineering or related fields;
2. Experience in isolation and culture of stem cells;
3. Experience in 3D cell culture, alginate hydrogels and *in vitro* vascularization;
4. Experience in 3D cell imaging and image analysis;
5. Hands-on experience on microfluidics-based cell culture.

### Preferential:

6. Knowledge of cancer biomarkers and MRD in AML;
7. Knowledge of proteomics.

## 7. Evaluation of the applications and publication of the results

The evaluation of the scientific and curricular background of the candidates should focus on the activity of the last five years that the candidate considers most relevant. The five-year period may be extended by the jury, at the candidates request, when justified by suspension of scientific activity for socially protected reasons, namely for reasons of parental leave, prolonged serious illness, and other situations of unavailability for work that are legally protected.

### Weight of the different curricular valuation criteria:

- a) curricular evaluation (80%)
  - Applicant's CV (25%)
  - Research experience with relevance for the project work plan (55%)
- b) Motivation Letter (10%)
- c) Interview (10%)

If the jury decides to obtain further clarifications and additional information about the curricular elements presented, the best 3 candidates classified on the basis of the curriculum may be called for an interview. For all candidates, the curricular evaluation will weight 90% and the interview will weight 10%.

Candidates are excluded from admission to this call if they do not fill out their application correctly or do not meet the obligatory admission requirements. If in doubt, the jury may ask any candidate additional documents in support of their statements.

False statements made by candidates will be sanctioned in accordance with the law.

The jury will draw up minutes of its meetings, which can be consulted at the candidate's request within 10 working days after the selection results are released.

The jury deliberates by means of a reasoned vote according to the evaluation criteria, with no abstentions allowed, and draws up a list of excluded and admitted candidates, ordered by respective classification.



All candidates are notified of the selection results by email. After notification, candidates have 10 working days to comment.

In the 90 days following the deadline for submission of applications, the jury's final decision is communicated to the candidates. Subsequently the institute Director, who is also responsible for the final decision of hiring, will ratify the decision of the jury.

This call is intended exclusively to fill the indicated position on offer and may be canceled before the final ranking list of candidates is ratified by the Director. Accordingly the position will no longer be available.

### **8. Submission of applications**

Applications must include all the documents proving that they fulfill the admission requirements, namely:

- a) Copy of certificate or diploma;
- b) Detailed Curriculum Vitae;
- c) Motivation letter.

The submission of applications is digital, in pdf format, from 11 to 24 July 2024, in the following link:

<https://dozer.i3s.up.pt/applicationmanagement/#/addapplications/46898ffc3c3ccd1292d18ceb31d151f>

### **9. Start and duration of the contract**

The planned start date of the contract is August 16, 2024 and is subject to budget availability. The predicted maximum duration of the contract will be 4 months and cannot exceed the end date of the project, currently set for 31/12/2024.

### **10. Non-discrimination and equal access policy**

i3S actively promotes a policy of non-discrimination and equal access. No applicant shall be privileged, benefited, prejudiced, or deprived of any right or exempted from any duty on the basis of ancestry, age, gender, sexual orientation, marital status, family situation, economic situation, education, origin or social condition, genetic heritage, reduced work capacity, disability, chronic illness, nationality, ethnic origin or race, territory of origin, language, religion, political or ideological beliefs, or trade union membership.

Within the framework of the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers, i3S adopts the Open, Transparent and Merit-based (OTM-R) principles for the recruitment of researchers, with the aim of conducting fair and transparent recruitment processes, bringing equal opportunities to all candidates.



### **11. Applicants with disabilities**

Under the terms of Decree-Law 29/2001, of February 3, the candidate with a disability is given preference in equal ranking, which takes precedence over any other legal preference. Candidates must declare under oath their degree of disability, the type of disability and the means of communication/expression to be used in the selection process, under the terms of the aforementioned decree.

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