



NOTICE OF OPENING OF AN INTERNATIONAL CALL FOR THE SELECTION OF A PhD HOLDER RESEARCHER UNDER DECREE-LAW NO. 57/2016

Internal code: Researcher/FCT_SEPTONITE/i3S/0606/2025

A call is opened for the position of a PhD holder, for an unfixed term work contract to carry out research duties within the project "SEPTONITE: Unlocking CD5L's Force: A New Hope for Overpowering Sepsis", with reference COMPETE2030-FEDER-00693500, operation no 15825, funded by COMPETE2030 and national funds through FCT – Fundação para a Ciência e a Tecnologia under the application MPr-2023-12.

Scientific Area: Immunology and infection

1. Project summary and work plan

Despite extensive research efforts, sepsis remains a leading cause of mortality worldwide, with no targeted immunomodulatory treatments currently available. One major reason for the failure of promising therapies in clinical trials is the lack of realistic preclinical models that accurately mimic the complexity of human sepsis, including its comorbidities and varied infection sources.

This project builds on previous work demonstrating that recombinant CD5L (rCD5L), when therapeutically administered, significantly improves survival in mouse models of sepsis. Given the strong potential of the rCD5L protein as an immunomodulatory therapy, we now aim to validate and refine its therapeutic efficacy using clinically relevant sepsis models that more accurately reflect the complexity of the disease in humans. The project will also focus on developing optimized forms of rCD5L with improved pharmacokinetic and therapeutic properties.

The main objectives of the work are:

- a) To determine the therapeutic efficacy of rCD5L in sepsis models that include biological factors and comorbidities representative of at-risk human populations.
- b) Develop and produce engineered bioactive rCD5L with improved pharmacokinetic properties, stability, and therapeutic efficacy.

2. Applicable Portuguese legislation

Decree No. 57/2016, of August 29 – Legal Framework for Scientific Employment (RJEC) – in its current version.

Portuguese Labor Code, in its current wording.

3. Jury

Chairman: Alexandre Carmo; Other Members: Joana Tavares and Joana Saraiva;
Substitute: Nuno dos Santos

4. Workplace

i3S - Rua de Alfredo Allen, 208 Porto, research group research group Cell Activation and Gene Expression.

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5. Professional category and monthly remuneration

Junior Researcher level 2.

€ 2.622,58, corresponding to index 38 of the Tabela Remuneratória Única.

6. Obligatory requirements for admission

- a) PhD degree in Biomedical Sciences or related areas;
- b) License to work with rodents, certified by the Portuguese DGAV or equivalent entities (functions A+B+D, former FELASA C);
- c) Scientific research background in Host/Microorganism Interactions, Immunology, and Microbiology;
- d) Extensive experience in molecular biology and protein biochemistry in expressing, producing, and purifying recombinant and modified proteins using mammalian expression systems;
- e) Demonstrated experience in handling mice, with a strong emphasis on animal welfare and ethical care practices. The candidate should provide clear evidence that animal well-being has been a consistent and central concern in previous experimental work;
- f) Previous experience with infection models in mice, particularly under BSL2 conditions;
- g) Proficiency in English, both spoken and written;
- h) Publications in internationally recognized, peer-reviewed journals in areas relevant to the project;
- i) Experience in mentoring students and contributing to academic supervision;
- j) Availability to start duties on 01/08/2025 (to be mentioned in the motivation letter).

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 candidate's 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) Detailed Curriculum (80%):
 - a. Previous experience in scientific research in areas related to the project (15%);
 - b. Experience in infection studies using various in vivo models (15%);
 - c. Demonstrated experience and commitment to animal welfare and ethical care practices in experimental work (5%).
 - d. Publications in internationally recognized peer-reviewed journals (10%);
 - e. Experience with CRISPR technology in vitro and in vivo for the generation of genetically modified animals and cell lines (10%);
 - f. Experience in cloning and production of recombinant proteins using mammalian cell expression systems (10%);

- g. Experience in RNA extraction, analysis, and interpretation of RNA sequencing data (5%);
 - h. Proficiency in flow cytometry (5%);
 - i. Participation and communication in scientific meetings (e.g., oral presentations and posters) (5%).
- b) Motivation Letter in English, mentioning availability to start duties on 01/08/2025 (10 %);
- c) Interview - *facultative* (10%).

If the jury decides to obtain further clarifications and additional information about the curricular elements presented, the 2 best candidates classified on the basis of the curriculum may be called for an interview.

Candidates who submit their application incorrectly or fail to meet the required qualifications for this competition will be excluded from admission.

The jury reserves the right to request any candidate, in case of doubt, to provide supporting documents for 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 in English, indicating availability to start duties on 01/08/2025;
- d) License for working with rodents certified by Portuguese DGAV or equivalent entities (functions A+B+D, former FELASA C);

- e) Other documentation relevant for the evaluation of qualifications in a related scientific area;
- f) Contacts of two references. These will only be contacted during the interview stage.

The submission of applications is digital, in pdf format, from 06/06/2025 to 23/06/2025, in the following link:

<https://dozer.i3s.up.pt/applicationmanagement/#/addapplications/2e24ed18db3cf273a07778d61df4418a>

9. Start and duration of the contract

The anticipated start date of the contract is 01/08/2025 and is subject to budget availability. The expected duration of the contract will be 24 months.

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.