



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

Internal code: Researcher/COM2025 /i3S/0903/2025

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 "*DecodAge: Linking systemic inflammation to tissue accelerated aging and unveiling a new biomarker for chronic kidney disease*", with reference COMPETE2030-FEDER-00651300, Project nr. 15507, funded by Portugal 2030 and co-funded by the European Union.

Scientific Area: Basic Medicine

1. Project summary and work plan

The DecodAge project endeavors to untangle the intricate relationship between tissue-specific inflammation and accelerated aging, with a focal point on investigating CD74 as a promising biomarker for the early detection of inflammatory diseases. Employing a comprehensive and interdisciplinary approach, the DecodAge aspires to propel scientific understanding, advance strategies in preventive medicine, and contribute to the evolution of personalized and predictive healthcare solutions.

Workplan:

- a) Task 1: Evaluate the causal effect of Cd74 Inhibition on inflammatory profile and biological age in mouse cells. The objective is to elucidate the crucial role of Cd74 in promoting age-related inflammatory phenotypes and driving the transcriptome towards stages resembling aged inflammatory cells.
 - a. Task 1.1. *In vitro* validation of Cd74 activation and inhibition.
 - b. Task 1.2. *In vitro* investigation of Cd74 role in driving an inflammatory profile and acceleration of biological age.
- b) Task 2. Impact of Cd74 inhibition on inflammation, frailty, lifespan, and multi-morbidities in middle-age mice. By systemically inhibiting Cd74 protein through Mzb antibody injections, this task seeks to investigate whether this intervention results in lowered frailty and decelerated biological age.
 - a. Task 2.1. Evaluation of Cd74 signaling pathway upon inhibition.
 - b. Task 2.2. Assessment of multi-dimensional markers during treatment.
- c) Task 3: Validation of CD74 as a human biomarker for chronic kidney disease.

In collaboration with the Nephrology Department at Hospital São João, we will acquire and analyze CD74 expression in human blood PBMC samples obtained from both early and late stages of CKD, including patients under SLGT2 inhibitors, and compare them to age-matched healthy donors as a baseline.

2. Applicable Portuguese legislation

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



INSTITUTO
DE INVESTIGAÇÃO
E INOVAÇÃO
EM SAÚDE
UNIVERSIDADE
DO PORTO

Rua Alfredo Allen, 208
4200-135 Porto
Portugal
+351 220 408 800
info@i3s.up.pt
www.i3s.up.pt

Portuguese Labor Code, in its current wording

3. Jury

Chairman: José Pedro Castro; Other Members: Margarida Saraiva, José Bessa;
Substitutes: Florence Janody, Diogo Sampaio e Castro.

4. Workplace

i3S - Rua de Alfredo Allen, 208 Porto, research group Ageing and Aneuploidy.

5. Professional category and monthly remuneration

Junior Researcher

€ 2,351,53, corresponding to index 33 of the Tabela Remuneratória Única, whose application is intended for PhD holders with reduced post-doctoral experience or without a post-doctoral scientific curriculum.

6. Obligatory requirements for admission

- a) PhD degree in Life and Health Sciences.
- b) Certificate of laboratory animal science (Felasa A/B/D).
- c) At least 2 previous publications in aging research.
- d) Technical expertise in primary cell culture and transcriptome analyses.
- e) Technical expertise in animal models of aging.
- f) Technical expertise in the analysis of inflammation and frailty phenotypes.

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) CV (90%)
 - a. Certificate of lab animal science (20%)
 - b. Experience in aging research (20%)
 - c. Specific technological expertise (20%)
 - d. Publications (20%)
 - e. Supervision skills (10%)
- b) Interview – optional (10%)

If the jury decides to obtain further clarifications and additional information about the curricular elements presented, the two 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 PhD diploma;
- b) Copy of Lab animal science certificate;
- c) Detailed Curriculum Vitae.

The submission of applications is digital, in pdf format, from 09/05/2025 to 22/05/2025, in the following link:

<https://dozer.i3s.up.pt/applicationmanagement/#/addapplications/f3c89bc8b8386e982e2a03821dbae34>

9. Start and duration of the contract

The anticipated start date of the contract is 16/06/2025 and is subject to budget availability. The maximum duration of the contract will be **18 meses**.

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

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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.