NOTICE OF OPENING OF AN INTERNATIONAL CALL FOR THE SELECTION OF A PhD HOLDER RESEARCHER

Internal code: Researcher/COMPETE2030/i3S/2309/2026

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 "Discovery of wall teichoic acid glycosylation inhibitors as next-generation antimicrobial agents", with reference COMPETE2030-FEDER-00688800, Operation no. 15781, funded by COMPETE2030 and national funds (FCT) under Call for Applications no. MPr-2023-12.

Scientific Area: Molecular and Cellular Microbiology

1. Project summary and work plan

The AntiGlyDisco project aims to develop a new generation of antimicrobial agents to address the growing problem of antibiotic resistance, focusing on Gram-positive bacteria and using *Listeria monocytogenes* as the main experimental model. Rather than acting directly on bacterial growth or survival, the project proposes an anti-virulence strategy based on inhibition of glycosylation of cell wall teichoic acids, a process important for virulence, immune evasion and antimicrobial resistance. One of the main targets is the enzyme RmlT, responsible for the addition of rhamnose to the cell wall teichoic acids of *L. monocytogenes*. The project aims to determine the three-dimensional structure and enzymatic mechanism of RmlT through crystallography, biochemical studies and computational modelling, as well as to analyse how glycosylation of the bacterial cell wall changes over the course of infection in animal models. In parallel, large compound libraries will be screened, virtual docking studies and medicinal chemistry approaches will be used to identify potential RmlT inhibitors. The selected compounds will subsequently be evaluated for their ability to inhibit the enzyme, their effects on bacteria, toxicity in mammalian cells and efficacy in infection models. Since similar enzymes are present in other important Gram-positive pathogens, such as *Staphylococcus* and *Enterococcus*, the strategy may have broader application. The ultimate goal is to develop an innovative therapeutic approach that reduces bacterial virulence, increases susceptibility to antibiotics and the host's natural defences, while preserving the microbiota.

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: Didier Cabanes; Other Members: Sandra Sousa, Johnny Lisboa; Substitute: Ana do Vale.

4. Workplace

i3S - Rua de Alfredo Allen, 208 Porto, research group Molecular Microbiology.

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Fundação para a Ciência e a Tecnologia
COMPETE 2030
PORTUGAL 2030
Co-funded by the European Union

5. Professional category and monthly remuneration
Junior Researcher
€2.679,17, corresponding to index 38 of the *Tabela Remuneratória Única*.

6. Obligatory requirements for admission
a) PhD in Cellular and Molecular Biology, Microbiology or a related scientific field;
b) Author of at least 3 original articles published in the field of the molecular study of pathogens responsible for infectious diseases;
c) Experience in the field of infectious pathogens and extensive experience in molecular biology techniques;
d) Research experience with human pathogens in a biosafety level 2 or 3 environment (P2/P3);
e) Experience in a business and/or industrial setting;
f) Experience in an international setting;
g) Oral and poster presentation of scientific results at international conferences;
h) Demonstrable experience in student supervision;
i) Experience in writing scientific articles and in writing or securing research projects;
j) Fluent in spoken and written English;
k) Immediate availability to begin work on the project.

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) Research experience relevant to the work plan, in accordance with the admission requirements defined for the competition (50%);
b) Detailed Curriculum Vitae (30%);
c) Motivation Letter in English (10%);
d) Interview - *facultative* (10%).

If the jury decides to obtain further clarifications and additional information about the curricular elements presented, the 3 (three) best candidates classified on the basis of the curriculum may be called for an interview. The candidate's final classification is expressed on a scale from 0 to 100. Candidates who are not interviewed will have their maximum score limited to 90% of the evaluation.

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.

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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 the PhD certificate or diploma;
b) Detailed curriculum vitae, highlighting previous experience relevant to the work plan;
c) Motivation Letter in English;
d) Other documents relevant to the assessment of qualifications in a related scientific field.

The submission of applications is digital, in pdf format, from September-23 to October-7, 2026, in the following link:

https://dozer.i3s.up.pt/applicationmanagement/#/addapplications/6ab3fecf1633594dbdcdeeac462df56c

9. Start and duration of the contract
The anticipated start date of the contract is December 1st, 2026, and is subject to budget availability. The expected duration of the contract will be 12 months, eventually extendable, and may under no circumstances extend beyond the project end date, currently expected to be 30 May 2028.

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,

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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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