



**ANNOUNCEMENT OF AN INTERNATIONAL SELECTION TENDER PROCEDURE FOR HIRING  
A DOCTORATE HOLDER UNDER DECREE-LAW NO. 57/2016 OF 29th AUGUST, AMENDED  
BY LAW 57/2017 OF 19th JULY**

Code: **Researcher/FCT\_PROJ2020/i3S/1202/2021**

The Board of Directors of i3S decided to open an international selection tender for 1 position for a doctorate holder in the scientific area(s) of Health and Life Sciences, under a work contract with non-fixed term under the Portuguese Labor Law in order to perform duties as researcher at i3S, within the project “Novel approaches to the development of next-generation antithrombotic leads” with reference PTDC/BIA-BQM/2494/2020, financed by Portuguese funds through FCT - Fundação para a Ciência e a Tecnologia/Ministério da Ciência, Tecnologia e Ensino Superior.

### **1. Project summary**

Thrombosis is a major contributor to the global disease burden. Conditions associated with this disorder are the leading cause of death and disability globally, accounting for an estimated 25% of all deaths and for mounting costs to healthcare systems. Despite the undeniable impact of thromboembolic disease, current therapeutic prevention and treatment strategies are inadequate. Recently developed direct oral anticoagulants possess desirable pharmacological properties but they still do not overcome the bleeding side-effects, especially when used in combination with anti-platelets or tPA. In addition, their widespread adoption is also still limited by their high cost and scarcity of antidotes. These pharmacological side-effects are tightly linked to the mechanism of action of direct oral anticoagulants, which relies on the blockade of the catalytic activity of two key procoagulant enzymes, factor Xa (FXa) and thrombin (FIIa). Our main goal is to find new anticoagulants that can be administered as a monotherapy, or in combination with other agents, to effectively treat or prevent thromboembolic disorders while having little or no impact on haemostasis. Due to the central roles of FIIa and FXa, late participants in this amplification cascade, a therapeutic fine-tuning of the system by directly blocking these procoagulant enzymes is challenging. Thus, this project aims to develop direct anticoagulants against alternative targets in the blood coagulation cascade that have not been clinically exploited to date or represent a completely unexplored mechanism of intervention.

The successful candidate will specifically investigate the inhibition potency and anticoagulant activities *in vitro* of potential inhibitors screened by Random nonstandard Peptide Integrated Discovery (RaPID) and chemically synthesized in collaboration with Dr. Richard Payne (University of Sydney, Australia). The candidate will also study the molecular determinants of inhibition, using X-ray crystallography, perform SAR studies, and investigate the efficacy of lead compounds *in vivo*.

### **2. Applicable Legislation**

- Decree-Law no. 57/2016 of 29th August, amended by Law 57/2017 of 19th July, which approved the doctorate hiring regime for doctorate holders, aiming at stimulating scientific and technological employment for all knowledge areas (RJEC);



- Labour Code, Law no. 7/2009 of 12th February, on its current draft;
- Regulatory Decree no. 11-A / 2017, of 29th December.

**3. Pursuant to article 13 of RJEC, the tender selection panel shall be formed by:**

President: Dr. Jorge Ripoll Rozada

Other members: Dr. Pedro J.B. Pereira; Dr. Sandra de Macedo Ribeiro.

4. **The workplace** shall be at i3S, Rua de Alfredo Allen, 208, Porto. Research group: Macromolecular Structure.

5. **Monthly remuneration:** Gross monthly remuneration is 2.134,73 Euros, in accordance with subheading a), no. 1, article 15 of RJEC and article no. 2 of Regulatory Decree no. 11-A/2017, corresponding to level 33 of the Civil Service Single Remuneration Table (TRU - Tabela de Remuneração Única), approved by Order no. 1553-C/2008, 31st December, with the category of Junior Researcher.

6. Any national, foreign and stateless candidate holding a doctorate degree in Biochemistry, Biophysics, Biology, or a related scientific field and a scientific and professional curriculum suited for the activity to be performed can submit their application. In the case of doctorate degrees awarded by a non-Portuguese higher education institution, the provisions of Decree-Law no. 66/2018 of 16th August, and all formalities established therein must be fulfilled at the application deadline.

7. The tender **admission specific requirements** are:

- Proven experience in Biochemistry, Structural Biology or a related discipline;
- Strong hands-on experience in molecular cloning, recombinant protein expression (*E. coli* and *P. pastoris*) and purification, protein characterization, enzymology and macromolecular crystallography are highly desirable.
- Previous experience with the zebrafish model organism will be positively valued.
- Relevant publication track record (including first authorship of at least two peer-reviewed scientific publications) in international peer-reviewed journals, preferably in the fields mentioned above;
- Fluency in spoken and written English;
- Ability to work independently but also to be a proactive member within a multidisciplinary team.

8. Pursuant to article 5 of RJEC, selection is to be made based on the **scientific and curricular career evaluation** of the candidate.

Scientific and curricular career evaluation focuses on relevance, quality and up-to-dateness:

a) of scientific and technological production in the last five years, deemed most relevant by the candidate;

b) of research activities, applied or based on practical work, developed in the last five years, deemed most impactful by the candidate;

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c) of knowledge extension and dissemination activities developed in the last five years, namely under the scope of the promotion of culture and scientific practices, deemed most relevant by the candidate.

9. The five-year period mentioned above can be extended by the panel, if requested by the candidate, whenever the suspension of scientific activities is reasoned by socially protected grounds like paternity leave, long-term serious illness, and other legal situations of unavailability to work.

10. **Evaluation criteria** are the following:

a) Detailed Curriculum (75%):

- Relevant laboratorial experience in the research area of the application (50%)
- Scientific and technological production, including oral/poster communications, publications and impact factors (15%)
- Participation in research projects (10%)

b) Letter of motivation (20%)

- Interest and motivation for the research area of the project (15%)
- Proficiency in English and written communication (5%)

c) Recommendation letters (5%)

11. With the purpose of further clarification of the curricular elements presented, the candidates can be selected for an interview. In this case, for the interviewed candidates, the first component of the evaluation will be valued in 90% (preserving the relative weight of the subcriteria listed in 10.) and the interview will be valued in 10%.

12. The final classification of the candidates shall be given based on a 0-100 scale.

13. The panel shall deliberate by means of roll-call vote, disclosing the selection criteria adopted, with no abstentions allowed.

14. Minutes of panel meetings are mandatory and shall include a summary of all occurrences of said meetings, as well as of all votes casted by the members and respective reasoning, and shall be provided to candidates whenever required.

15. After selection criteria application, the panel shall prepare a sorted list of approved candidates and their respective classifications.

16. The final decision of the panel shall be validated by the leader of the institution, who is also in charge of deciding about the hiring.

17. **Applications** shall include all supported documents encompassed by section 7 and 8 for tender admission, namely:

- a) Copy of certificate or diploma;
- b) Curriculum vitae, detailed and structured pursuant to sections from 7 to 11;



- c) Other documentation relevant for the evaluation of qualifications in a related scientific area;
- d) Letter of motivation (in English – mandatory);
- e) Two recommendation letters.

Candidates shall submit their application by filling in the required information in the form provided, accompanied by the supporting documentation, in a digital form (PDF format), between 2021/02/12 and 2021/03/07 through the link:

[https://dozer.i3s.up.pt/applicationmanagement/#/addapplications/ResearcherFCT\\_PROJ2020i3S12022021](https://dozer.i3s.up.pt/applicationmanagement/#/addapplications/ResearcherFCT_PROJ2020i3S12022021)

18. All candidates who formalize their applications in an improper way or fail to prove the requirements imposed by this tender are excluded from admission. In case of doubt, the panel is entitled to request from any candidate further documentation supporting their statements.

19. False statements provided by the candidates shall be punished by law.

20. Both an admitted and excluded candidate list and a final classification list shall be published on the website of the Institute and the candidates shall be notified by email.

After publication of the results, candidates shall have 10 working days to comment. Within 90 days following the deadline for the submission of applications, the final decisions of the jury shall be disclosed on the i3S website, [www.i3s.up.pt](http://www.i3s.up.pt).

The expected starting date is 01/04/2021.

21. This tender is exclusively destined to fill this specific vacancy and can be terminated at any time until approval of the final candidate list, expiring with the respective occupation of said vacancy.

22. Non-discrimination and equal access policy: i3S actively promotes a non-discrimination and equal access policy, wherefore no candidate can be privileged, benefited, impaired or deprived of any rights whatsoever, or be exempt of any duties based on their ancestry, age, sex, sexual preference, marital status, family and economic conditions, instruction, origin or social conditions, genetic heritage, reduced work capacity, disability, chronic illness, nationality, ethnic origin or race, origin territory, language, religion, political or ideological convictions and union membership.

23. Pursuant to Decree-Law no. 29/2001 of 3rd February, disabled candidates shall be preferred in a situation of equal classification, and said preference supersedes any legal preferences. Candidates must declare, on their honor, their respective disability degree, type of disability and communication/expression means to be used during selection period on their application form, under the regulations above.

24. The panel has approved this announcement in meeting held on 2021/02/01.

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