ANNOUNCEMENT OF AN INTERNATIONAL SELECTION TENDER PROCEDURE FOR HIRING A DOCTORATE HOLDER UNDER DECREE-LAW NO. 57/2016 OF 29 AUGUST, amended by Law 57/2017 of 19 July

Internal reference: JuniorResearcher/ISIDOReVIRAL/IBMC/1504/2024

The IBMC opens an international call for the recruitment of a Junior Researcher (post-doctoral) working as Bioimage Analyst, under a work contract with non-fixed term under the Portuguese labor Law.

1. Project summary:
Representative model systems are needed to improve understanding of infectious diseases and to test new interventions. Traditional in vitro virology uses transformed cell lines that are different from natural cells, leading to problems with antiviral efficacy. Animal models, while useful, are costly and raise ethical concerns. Primary cell models and human stem cell-derived organoids offer better alternatives, allowing relevant co-cultures and bridging the gap between cell lines and in vivo models. The ISIDORe VIRAL (Viral Infectiology Research with Advanced Laboratory models) joint research project aims to develop novel ex vivo models, including tissues and organoids, for the study of viral infections, thereby enhancing ERINHA services. This will involve collaboration with several European groups developing advanced imaging techniques to follow virus-cell interactions. As part of the project, we intend to recruit a Bioimage Analyst to develop and implement image analysis solutions to integrate different microscopy imaging modalities for comprehensive multimodal imaging approach.

2. Applicable legislation:
- Decree no. 57/2016, amended by Law 57/2017, pertaining to the hiring of candidates with doctoral degrees in the areas of science and technology.
- Labor Law No. 7/2009.
- Regulatory Decree 11-A/2017.

3. The selection jury has the following composition:
Chairman: Paula Sampaio
Vowels: Maria Azevedo
Vowels: Maria Lazaro
Substitute vowels: André Maia

4. Workplace: IBMC/i3S, Rua Alfredo Allen, 208, Porto, Portugal.

5. Salary: The position is a Junior Researcher and carries a monthly wage of 2.294,94 Euros, in line with national guidelines.

6. General requirements for the position are:
- PhD degree in engineering, mathematics, computer science, physics, biosciences or similar.
- Programming skills (Python and Matlab or Java)
- Experience in developing bio-image analysis scripts
- Experience in open-source image analysis software packages (e.g. ImageJ/Fiji, CellProfiler, etc...)

- Knowledge of modern machine learning and deep learning algorithms
- Knowledge of statistical analysis
- Knowledge of Cloud computing
- Knowledge of bioimaging technologies; image formation, optics and advanced digital image acquisition

7. The selection will be made through evaluation of the following criteria:
- Experience with relevant scientific techniques related to the application area (60%).
- Track record of scientific achievements (15%).
- Letter of motivation (10%).

Candidates achieving a score of 70% or more on initial review with be short-listed for interview (10%).

8. The final classification system for candidates is expressed on a scale from 0 to 100. Each member of the jury will rank candidates based on the selection criteria and a consensus list will be drawn up of candidate rankings.

Minutes of the proceedings, including the individual rankings of jury members, will be recorded and made available to candidates when requested.

9. The final decision of the jury will be ratified by the managing director of the institute, prior to final appointment.

10. Application:
Applications should be written in English and include:
a) PhD certification.
b) Motivation letter.
c) Full CV (in English).

All documents should be provided in PDF format using the following web link:
https://dozer.i3s.up.pt/applicationmanagement/#/addapplications/eedb20c43d653584354b2f140d143f1

Applications will be accepted from 27th May 2023 to 14th June 2024.

Candidates who fail to submit all the required documents will be excluded from the process. In case of doubt, the jury reserves the right to request supporting documents, relevant to the application, from the candidate in question.

11. The **list of candidates and their final rankings** will be published on the institute website (www.ibmc.up.pt) under 'Open Positions'. Candidates will also be notified of the outcome by email.

12. After **publication of the results**, candidates have 10 working days to respond. The final rankings will be published 90 days after expiry of the application deadline on the institute website (www.ibmc.up.pt) under 'Open Positions'.

The expected start date of the contract is <u>15th July, 2024</u>.

13. This call is specific to the advertised vacancy and can be terminated at any time before approval of the final candidate list.

14. Non-discrimination and equal access policy: Candidates will be assessed using an (OTM-R) open, transparent and merit-based recruitment process, based on the guidelines laid down in the European Charter for Researchers. The recruitment process will adhere to current data protection legislation.

The IBMC/i3S actively promotes a policy of non-discrimination and equal access, so that no candidate can be privileged, benefited, harmed or deprived of any right or exempted from any duty resulting from ancestry, age, gender, sexual orientation, marital status, family situation, economic status, education, origin or social status, genetic heritage, reduced work capacity, disability, chronic illness, nationality, ethnic or race origin, territory of origin, language, religion, political or ideological beliefs and union membership.

15. In the event that two candidates of equal scientific merit apply, applicants with proven disability will be given preference (D.L. nº 29/2001). To be considered, disabilities (including type and respective degree of impairment) should be declared upon initial application.