

CALL FOR AWARDING RESEARCH FELLOWSHIPS WITHIN PROJECT GRANTS AND R&D INSTITUTIONS

1 Research Fellowship for PhD student

Ref.: 544.2 – 1 BI ED_BINDER

1 Research Fellowship(s) (BI) is(are) open at the **FCiências.ID – Associação para a Investigação e Desenvolvimento de Ciências**, for the project/R&D institution BINDER – Melhorando a Aprendizagem Profunda Bio-Inspirada para a Radiômica, PTDC/CCI-INF/29168/2017, financed by national funds by FCT / MCTES (PIDDAC) under the programme Programme All Scientific Domains 2017, under the following conditions:

1. **Scientific Area:** Computer Science
2. **Requirements for admission:** BSc in the area of Life Sciences or Informatics; participation in research projects involving machine learning.
3. **Additional optional skills and qualifications:** Experience in using neural architectures for detection and segmentation in medical imaging; knowledge of radiomics in the context of clinical applications; experience in applying machine learning to radiomics data; fluency in Portuguese and English.
4. **Contracting requirements:** Presentation of the academic qualifications and/or diplomas. Enrolment in a PhD program.
5. **Work plan:** The objective of project BINDER is to improve the state of the art in two crucial phases of the radiomics workflow, specifically (1) tumor and organ segmentation and (2) development and validation of predictive models, thanks to the extensive use of advanced machine learning techniques, particularly the ones based on deep neural networks. The hypothesis of radiomics is that the distinctive imaging features between disease forms may be crucial for predicting prognosis and therapeutic response for various conditions, thus providing valuable information for personalised therapy. Currently, many crucial phases of the radiomics workflow are manual, and thus time-consuming, subjective, and prone to errors. Project BINDER contributes to the development of faster, more objective, and more robust radiomics. The selected candidate should implement an optimized deep learning system capable of analysing tumor imaging for the semi-automatic delivery of diagnosis.
6. **Legislation framework:** Research Fellowship Holder Statute, in accordance with Law 40/2004, of 18 August, in its current version and the FCT Regulation for Research Studentships and Fellowships, in its current version (Reg. 950/2019 published in DR on 16th December: <https://dre.pt/application/file/a/127230968>, or at the FCT website: <https://www.fct.pt/apoios/bolsas/regulamento.phtml.pt>), and FCIências.ID Fellowship Regulation, as approved on 12th May 2020 (available at [Regulamento de Bolsas de Investigação Científica da FCIências.ID](https://www.fciencias.id/regulamento-de-bolsas-de-investigacao-cientifica-da-fciencias.id)).
7. **Place of work:** The work will be developed at the LASIGE research center, Faculty of Sciences of the University of Lisbon, under the scientific supervision of Professor Sara Silva.
8. **Fellowship duration:** This position is initially opened for 4 months and will begin on April 2022. The fellowship contract may be potentially renewed for until the end of the project.

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9. **Monthly allowance:** The fellowship amounts to € 1144,64 ,according to [table values](#) of the fellowships awarded directly by the FCT, IP. The fellowship holder will have a personal accident insurance and can ensure the right to social security through adherence to the voluntary social insurance scheme, if not covered by any other social protection scheme, pursuant to *Código dos Regimes Contributivos do Sistema Previdencial de Segurança Social*. The fellowship will be paid monthly by bank transfer
10. **Evaluation and selection process:** Candidates will be assessed by the quality of their CV (50%) and a motivation letter (50%).
11. **Selection Committee:** Sara Silva, FCUL (president), Cátia Pesquita, FCUL (member), Leonardo Vanneschi (member), Mauro Castelli, NOVA IMS (alternate)
12. **Publication/notification of results:** All the candidates will be notified by e-mail, sent by the call holder, with the selection meeting minutes enclosed.
13. **Deadlines:** This call for applications is open from 18/02/22 to 03/03/2022 .
14. **Application:** Applications should be sent via e-mail to sara@fc.ul.pt, by attaching the following documents:
- Curriculum vitae - **mandatory availability through the [CIÊNCIAVITAE](#) system**;
 - Certificate of completion of previous degree;
 - Motivation letter.
15. **Time limits for the appeal procedure:** In case of negative decision, the candidates have 10 business days, after the date of announcement of the results of the candidates evaluation, to pronounce their disagreement in accordance with the *Código do Procedimento Administrativo*. Appeals against the final decision may be submitted to the Administration Board of FCiências.ID (fciencias.id@fciencias-id.pt) within 15 business days after the notification date

Note 1: The documents that prove the entitlement of the academic qualifications and diplomas, or the proof of registration in the academic degree or diploma requested on the call, can be dismissed during the application period and replaced by a declaration on their honour from the applicant. Their delivery is mandatory for the fellowship contractualization.

NOTE 2: Please note that - higher education degrees and diplomas awarded by foreign higher education institutions need to be recognized by a Portuguese higher education institution, pursuant to the [Decree-Law nr. 66/2018](#) (August 16) and the [Ministerial Order nr. 33/2019](#) (January 25). The presentation of the recognition certificate is mandatory for contract signature. More information can be obtained at: <https://www.dges.gov.pt/en/pagina/degree-and-diploma-recognition>.