

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

1 Research Fellowship (BI) for a Master Student

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 OPTOX - Development and validation of bio-optical ecotoxicological tests in marine phototrophs, PTDC/CTA-AMB/30056/2017, financed by Fundação para a Ciência e a Tecnologia, I.P./MCTES through national funds (PIDDAC), under the following conditions:

1. **Scientific Area:** Computer Science
2. **Requirements for admission:** BSc (“Licenciatura”) in Computer Science or similar scientific area.
3. **Additional optional skills and qualifications:** Enrolment in a MSc in Computer Science or related area, experience in programming languages, fluency in English, both spoken and written, fluency in Portuguese, both spoken and written, experience in image analysis, segmentation and classification with deep learning architectures.
4. **Contracting requirements:** Presentation of the academic qualifications and/or diplomas. Enrolment in a MSc in Computer Science or related area.
5. **Work plan:** The OPTOX Project aims to apply non-invasive high-throughput screening (HTS) techniques, namely pulse amplitude modulated (PAM) fluorometry, laser induced fluorescence (LIF) and spectroradiometry, as tools for ecotoxicology assessment in marine phototrophs exposed to emerging contaminants. These tests will be applied in model organisms, representative of major marine autotrophic groups (microalgae, macroalgae and marine angiosperms such as seagrasses and halophytes), and integrated through artificial intelligence (AI) for ecotoxicological indexes development. Allied to this innovative bio-optical approach, biochemical/metabolic tests will also be performed in exposed organisms, allowing confirmation of the physiological stress conditions. This multidisciplinary approach intends to produce innovative ecotoxicology tests of great added value for future management requirements and impact assessment. The chosen candidate will apply an array of Machine Learning methods to the data provided by the project, performing a comparison of strengths and weaknesses of each type of learning algorithm in search of the best possible predictive models. Special attention will be given to the use of Convolutional Neural Networks and other deep learning methods for the analysis of the data in image format.
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 unit, Department of Informatics of FCUL, under the scientific supervision of Professor Sara Silva.
8. **Fellowship duration:** This position is initially opened for 3 months and will begin on October 2021. The fellowship contract may be potentially renewed for 3 months.

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9. **Monthly allowance:** The fellowship amounts to € 835,98 ,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 their motivation letter (50%).
11. **Selection Committee:** Sara Silva, FCUL (President), Bernardo Duarte, FCUL (1st Effective Member), Vanessa Fonseca, FCUL (2nd Effective Member), Pedro Mariano, ISCTE (1st Alternate Member), Leonardo Vanneschi, NOVA IMS (2nd Alternate Member).
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 08/09/21 to 21/09/2021 .
14. **Application:** Applications should be sent via e-mail to sara@fc.ul.pt, by attaching the following documents:
- Curriculum vitae – **CV may be submitted in pdf or through the [CIÊNCIAVITAE](#) system;**
 - Certificate of completion of previous degree;
 - Motivation letter and other documents considered relevant.
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>.

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