

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

2 (two) Research fellowship (BI) for MSc Student

2 Research Fellowship(s) (BI) for a master student is(are) open at the **FCiências.ID – Associação para a Investigação e Desenvolvimento de Ciências**, for the project/R&D institution ImproveOR: Building decision support tools for improved operating room management, PTDC/EGE-OGE/30442/2017, financed by national funds by FCT / MCTES (PIDDAC) under the programme Programme All Scientific Domains, under the following conditions:

1. **Scientific Area:** Operational Research
2. **Requirements for admission:** Bachelor Programme in Applied Mathematics – Branch in Statistics and Operational Research
3. **Additional optional skills and qualifications:** 2nd year student of the Master's degree in Statistics and Operational Research
4. **Contracting requirements:** Presentation of the academic qualifications and/or diplomas. Enrolment in Master's degree in Statistics and Operational Research
5. **Work plan:** The aim is to develop decision support tools to improve operating room management. The synthesis of the work plan to be developed: Study of the bibliography appropriate to this type of problem and study of the problem of scheduling elective surgeries in partner hospitals of the project, in particular in the hospital of Évora. Determination of the best estimation for the duration of each type of surgical procedure. Development of a ILP model for the problem and heuristic methods for building acceptable solutions of good quality. Development of Improvement heuristic methods in order to improve the quality of the feasible solutions obtained. Different heuristic approaches will be studied in order to choose the ones that will show the best results. Implementation of heuristic methods developed. Computer tests. Writing of the report.
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>), and FCiências.ID Fellowship Regulation, as approved on 12th May 2020 (available at [Regulamento de Bolsas de Investigação Científica da FCiências.ID](#)).
7. **Place of work:** The work will be developed at the Center for Mathematics, Fundamental Applications and Operations Research / Faculty of Sciences of the University of Lisbon under the scientific supervision of Professor Maria Eugénia Vasconcelos Captivo.
8. **Fellowship duration:** This position is initially opened for 4 months and will begin on November 2021. The fellowship contract may be potentially renewed for until the end of the project, in accordance with the provisions of Regulation of Research Fellowships from the Foundation for Science and Technology, I.P.
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

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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 Interview (50%).
11. **Selection Committee:** Prof. Doutora Maria Eugénia Captivo (President of the jury), Prof. Doutor Luís Gouveia (member of the jury), Prof. Doutor Maria da Conceição Fonseca (member of the jury), Prof. Doutora Ana Paias (alternate member of the jury).
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 18/10/21 to 29/10/2021 .
14. **Application:** Applications should be sent via e-mail to mecaptivo@fc.ul.pt, by attaching the following documents:
 - a. Curriculum vitae - **CV may be provided in PDF or through the [CIÊNCIAVITAE](#) system;**
 - b. Certificate of completion of previous degree;
 - c. 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>.