

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

One research fellowship (BI) for 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 Ruthenium-peptide conjugates: arrows for selectively targeting breast cancer/CQE, PTDC/QUI-QIN/0146/2020, financed by national funds by FCT / MCTES (PIDDAC) under the programme Programme All Scientific Domains, under the following conditions:

1. **Scientific Area:** Computational Biochemistry
2. **Requirements for admission:** R&D activities to be carried out by Master's or Integrated Master's (BI) students. Candidates must have a degree in biochemistry or related fields as a minimum, as well as relevant research experience in the field of computational biochemistry (simulation and molecular modelling).
3. **Additional optional skills and qualifications:** Master's student with availability to carry out the final Master's work. Knowledge of molecular dynamics techniques.
4. **Contracting requirements:** Presentation of the academic qualifications and/or diplomas. Enrollment in the study cycle that confers the requested degree in this call.
5. **Work plan:** The work plan will focus on studying the molecular details of conjugating the ruthenium complex TM34 with peptides (RuPCs). We will evaluate the impact of these new conjugations on molecular membranes permeabilities and on the P-glycoprotein (P-gp) inhibitory action. The main tasks planned include: i) Parameterization of several TM34 complexes conjugated to several amino acid sequences and study the propensity of these compounds to interact with a membrane model; ii) Prepare a protocol based on molecular dynamics and umbrella-sampling to calculate the membrane permeability of TM34 and its peptide derivatives; iii) Setup a P-gp + membrane system to study the pmf profile of TM34 (and derivatives) interacting with the channel of this membrane transporter.
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](https://www.fciencias.id/regulamento-de-bolsas-de-investigacao-cientifica-da-fciencias.id)).
7. **Place of work:** The work will be developed at BioISI - Instituto de Biosistemas e Ciências Integrativas, Departamento de Química e Bioquímica/Faculdade de Ciências da Universidade de Lisboa under the scientific supervision of Professor Miguel Machuqueiro.
8. **Fellowship duration:** This position is initially opened for 6 months and will begin in September 2021. The fellowship contract may be potentially renewed for more 6 months, 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 (60%) and relevance of previous experience (30%). If necessary, the candidates with the highest ranking will be called for an interview (10%).

11. **Selection Committee:** Miguel Machuqueiro (Presidente), Paulo Jorge Costa (Vogal), Bruno Victor (Vogal) e Pedro Magalhães (Vogal suplente)

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 19/07/21 to 06/08/2021 .

14. **Application:** Applications should be sent via e-mail to machuque@ciencias.ulisboa.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. Motivation Letter with References.

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>.