

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

### One Post-Doctoral Research Fellowship (BIPD) for a Doctor

1 Post-Doctoral Research Fellowship(s) (BIPD) is(are) open at the **FCiências.ID – Associação para a Investigação e Desenvolvimento de Ciências**, for the project/R&D institution NANOBIO-SOLUÇÕES IN SILICO: CONCEPÇÃO COMPUTACIONAL DE COMPLEXOS METÁLICOS Y POLIOXOMETALATOS BIOATIVOS PARA APLICACIONES MÉDICAS / BioISI – BioSystems & Integrative Sciences Institute, PTDC/QUI-QFI/29236/2017, financed by national funds by FCT / MCTES (PIDDAC) under the programme All Scientific Domains, under the following conditions:

1. **Scientific Area:** Chemistry, Biochemistry, Physics or similar
2. **Requirements for admission:** Doctor in Chemistry, Biochemistry, Physics or similar at theoretical and computational level.
3. **Additional optional skills and qualifications:** Experience on the topic about DNA G-quadruplexes will be appreciated and the experience on Gaussian, Quantum Espresso and GROMACS will be also positively evaluated
4. **Work plan:** Study of the competition between the interaction in the grooves, end stacking and intercalation of the  $[Mo(C_3H_5)Br(CO)_2(phen)]$  complex in DNA G-quadruplexes using molecular dynamics methods and the influence of metal change or substitutions in phenanthroline in this process. The objectives of this work are the computational design of stable  $[Mo(C_3H_5)Br(CO)_2(phen)]$  (M = Mo, W) in which intercalation and end stacking should be favored over the binding in the grooves and loops from a thermodynamic point of view taking into account the results from the literature and, if possible, from the kinetic point of view with the determination of the Gibbs free energy profiles.
5. **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 (available at [Regulamento de Bolsas de Investigação da FCT, I. P.](#)), and FCIências.ID Fellowship Regulation, as approved on 12<sup>th</sup> May 2020 (available at [Regulamento de Bolsas de Investigação Científica da FCIências.ID](#)).
6. **Place of work:** The work will be developed at the BioISI – Biosystems and Integrative Sciences Institute, Faculty of Sciences, University of Lisbon under the scientific supervision of Professor Adrià Gil Mestres and Nuno Galamba.
7. **Fellowship duration:** This position is initially opened for 6 months and will begin on January 2021. The fellowship contract may be potentially renewed for 6 months, in accordance with the provisions of Regulation of Research Fellowships from the Foundation for Science and Technology, I.P.
8. **Monthly allowance:** The fellowship amounts to € 1600, 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.

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9. **Evaluation and selection process:** Candidates will be assessed by the quality of their CV 75% and Interview 25%.
10. **Selection Committee:** President: Adrià Gil Mestres, 1st member: Maria José Calhorda, 2nd member: Nuno Galamba, Alternate member: Paulo J. Costa
11. **Publication/notification of results:** All the candidates will be notified by e-mail, sent by the call holder, with the selection meeting minutes enclosed.
12. **Deadlines:** This call for applications is open from 02/11/20 to 25/11/2020.
13. **Application:** Applications should be sent via e-mail to [agmestres@fc.ul.pt](mailto:agmestres@fc.ul.pt) and [njgalamba@fc.ul.pt](mailto:njgalamba@fc.ul.pt), by attaching the following documents:
  - a. Curriculum vitae;
  - b. Certificate of completion of previous degree;
  - c. Proof of registration in the study cycle that confers the requested degree in this call;
  - d. Cover letter
14. **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](mailto: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 during 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>.