

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

### Research Fellowship (BI) for BSc collaborator

One Research Fellowship (BI) for BSc collaborator is open at **FCiências.ID – Associação para a Investigação e Desenvolvimento de Ciências**, for the project “Targeting multi-resistant tuberculosis with new potent isoniazid derivatives: an integrated medicinal chemistry approach (TARGTUB), PTDC/MED-QUI/29036/2017, financed by national funds by FCT / MCTES (PIDDAC) under the programme FCT/MCTES (PIDDAC), under the following conditions:

1. **Scientific Area:** Chemistry or related areas.
2. **Requirements for admission:** Candidates must have as mandatory requirements:
  - Degree in chemistry or related areas;
  - Experience in organic synthesis techniques and chromatographic methods;
  - Experience in spectroscopic characterization techniques (NMR, IR, UV-Vis, M)
3. **Factors preferred:** Candidates with a degree score of fourteen or above (out of twenty), research experience in the Organic Chemistry area and interest in pursuing their academic career will be favored.
4. **Work plan:** The main objective to be achieved with the project in which this grant is inserted is the development of a good drug candidate against multidrug-resistant tuberculosis (MDR-TB). The results of previous projects in which the team was involved have led to the conclusion that *N,N'*-acyl-hydrazides and hydrazones derived from isoniazid (INH), one of the two drugs of excellence for the treatment of TB, may be more active than INH itself against *Mycobacterium tuberculosis* wt, and also against the most frequent mutated strain conferring INH resistance (S135T mutation in KatG protein). Thus, based on the *in silico* design of compounds structurally related to those that showed greater activity, the work plan for this grant will be as follows:  
Synthesis, purification, structural characterization (UV-Vis, IR, <sup>1</sup>H NMR, <sup>13</sup>C NMR and MS correlation NMR) and evaluation of the purity (GC and / or HPLC) of isoniazide derivatives, namely *N,N'*- hydrazides and hydrazones. The synthetic methodologies to be followed will be chosen case by case, according to the compound to be synthesized.
5. **Legislation framework:** Statute of the Scientific Research Fellowship, in accordance with Law 40/2004, of 18 August, as amended and republished by Decree-Law No. 202/2012 of 27 August, and as amended by Decree-Law No. 233/2012 of 29 October and by Law No. 12/2013, of January 29, and Decree-Law No. 89/2013 of 9 July; And also by the FCT, I.P. Fellowships Regulation, in force (<https://www.fct.pt/apoios/bolsas/docs/RegulamentoBolsasFCT.pdf>) and **FCiências.ID** Fellowship Regulation, as approved on 23<sup>rd</sup> February 2017.
6. **Place of work:** The work will be developed at the Chemistry and Biochemistry Centre (CQB)-Chemistry and Biochemistry Department, Science Faculty, Lisbon University, under the scientific guidance of Professor Susana Pina Santos.
7. **Fellowship duration:** This position is initially opened for three. months and will begin on November 2018. The fellowship contract may be renewed to more nine. 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 € 745 according to table values of the fellowships awarded directly by the FCT, IP. (<http://www.fct.pt/apoios/bolsas/valores>).

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The fellowship holder will have a personal accident insurance and, if not covered by any social protection scheme can ensure the right to social security through adherence to the voluntary social insurance scheme, pursuant to Código dos Regimes Contributivos do Sistema Previdencial de Segurança Social.

The fellowship will be paid monthly by bank transfer.

9. **Selection method:** The candidates will be assessed by the quality of their *curriculum* according to the objectives of the project (30%) and to the adequacy of their profile to the performance of specific tasks foreseen in work plan defined (70%). The evaluation will take in account the merits of the candidates regarding to their academic education and their motivation for research. Only candidates with a global evaluation of 75% (out of 100%) will be considered for the grant award, that may eventually not be allocated. Interviews will be conducted, in person or by electronic mode, to the top three candidates that meet the requirements of the previous clause (0 - 50% additional).

10. **Selection Committee:** Prof. Filomena Martins Leitão (President), Prof. Susana Pina Santos (Full member), Doctor Miguel Ângelo Machuqueiro (Full member), Doutora Marina Reis Agapito (Substitute member).

11. **Publication/notification of results:** The final results of the evaluation will become public, through ordered list *final grade obtained* which will be posted at the entrance hall of the **FCiências.ID**, located at the Faculdade de Ciências da Universidade de Lisboa, C1 bdg – 3<sup>rd</sup> floor, Campo Grande, 1749-016 Lisboa, and the selected candidate will be notified by *e-mail*.

12. **Deadlines:** This call for applications is open from 22th November to 5th December 2018

13. **Application:** Applications may be sent exclusively via e-mail to [smsantos@ciencias.ulisboa.pt](mailto:smsantos@ciencias.ulisboa.pt) with the mandatory reference PTDC/MED-thurs/29036/2017, attaching the following documents:

- Documents attesting that the applicant meets the conditions for the type of grant, in particular qualification certificate for the bachelor's degree, with the final classification and with the classifications of all the assignments carried out;
- *Curriculum Vitae* detailed and updated, where the candidate's full address, email address and contact telephone number are required;
- Letter of Motivation.

**NOTE:** Please note that Degrees obtained in foreign countries need a Portuguese Recognition certificate and, in some cases, a equivalence certificate issued by a Portuguese high degree institution according to the Decree-Law nr. 341/2007, of Oct 12th, the ministerial order nr. 29/2008, of Jan 10th and the ministerial order nr. 227/2017, of July 25th. The certificate request date must be prior to the application deadline. The presentation of such certificates is mandatory for contract signature. For further info please see [https://www.ulisboa.pt/sites/ulisboa.pt/files/basicpage/docs/guide\\_equiv\\_rec\\_foreign\\_degrees\\_august2017\\_site.pdf](https://www.ulisboa.pt/sites/ulisboa.pt/files/basicpage/docs/guide_equiv_rec_foreign_degrees_august2017_site.pdf)