

#### # 2717

# Public Notice - International Selection Procedure – PhD Scientific Researcher Recruitment FCiências.ID/2018/DL57/BioISI/16

**FCiências.ID** - **Associação para a Investigação e Desenvolvimento de Ciências,** through its Chairman of the Board of Directors, hereby announces the opening of an international call for the recruitment of a scientific researcher with a PhD degree, within the scope of **Project** BioMOl4Health, PTDC/BIA-BQM/28355/2017, in the form of an employment contract with an uncertain term, according to the Portuguese Labour Code and Decree-Law No. 57/2016, of August 29<sup>th</sup>, as amended by Law No. 57/2017, of July 19<sup>th</sup>, and complementary legislation.

### I - Admission Requirements

Portuguese nationals, foreign and stateless persons may submit applications to this selection procedure, provided they hold a doctoral degree<sup>1</sup> in Biochemistry (branch Pharmaceutical and Toxicological Biochemistry), and fully comply with the following requirements:

- a) The PhD must not have been granted for more than 2 years.
- b) Experience in cell line culture methods; biomolecules FTIR analysis in cell lines; phenolic compounds bioavailability studies using cell lines; cytotoxicity studies in human cell lines, human cell porteomes analysis using 2D electrophioresis and western blot techniques.
- c)The candidate must have also experience in the use of FTIR methodology for analysis of biomolecules in human cells
- c) The candidate must also have experience in molecular mass analysis of small molecules by mass spectrometry
  - d) Experimental knowledge about Food Technology is also required
- <sup>1</sup> Applicants with doctoral degrees obtained in foreign countries need, in accordance with Decree-Law No. 341/2007, of October 12<sup>th</sup>, as regulated by Government Order No. 227/2017, of July 25<sup>th</sup>, to be registered as holders of a doctoral degree, with all inherent entitlements. Applicants to whom, under the terms of Decree-Law No. 283/83, of June 21<sup>th</sup>, equivalence or recognition of the degree of Doctor has been granted are also valid. The presentation of the registration / recognition /equivalence certificate is mandatory for contract signature.

#### II. Applicable Law

- Decree-Law No. 57/2016, of August 29<sup>th</sup>, in the wording conferred on it by Law No. 57/2017, of July 19<sup>th</sup> (RJEC), taking also into account the provisions of Regulatory Decree No. 11-A/2017, of December 29<sup>th</sup>;
- 2. Portuguese Labour Code, as approved by Law No. 7/2009, of February 12<sup>th</sup>, in its current version (CT);
- 3. Administrative Procedure Code, as published in Decree-Law No. 4/2015, of January 7<sup>th</sup>, in its current version (CPA).

## III. Work Plan

The objectives of the work plan are belong to PTDC/BIA-BQM/28355/2017, being the activities envisaged those described in the project

Aim of the work is to identify food or food-based compounds that may help to reduce the absorption of cholesterol from the diet and to develop novel foods for that purpose

Task 2: Isolation and identification of bioactive compounds

Infusions obtained from algae and medicinal plants will be prepared and analyzed by LC-MS / MS in order to identify some of the existing compounds



#### Task 4: Cell toxicity studies

The toxicity of aqueous extracts obtained in the above task will be analized on Caco-2 cell lines and HT29-MTX co-cultures.

Task 5: Effect of phenolic compounds and ezetimibe in the cellular components

In this activity the effect of the extracts on the various biological components of the cells will be studied using FTIR methods.

Task 6: Effect of the extracts on cholesterol permeation, alone and simultaneously with the drug ezetimibe

In this activity we will study the effect of extracts on cholesterol permeation through the intestinal barrier Caco-2-HT29-MTX. Cholesterol will be determined by RP-HPLC-DAD. The action of the extracts when added simultaneously with the drug will also be studied to detect possible interactions in a simultaneous up-take.

Task 7: Effect on the cellular proteome

After the intestinal cells have been in contact with the selected phenolics and extracts, the cellular protein fraction will be extracted and analyzed by 2D electrophoresis and western blot, in the latter case to investigate changes in the cholesterol transporter proteins that justify the reductive activity in the permeation of the cholesterol.

# IV. Composition of the Jury

In accordance to article 13 of the RJEC, the members of the jury are:

- President Maria Luisa Serralheiro
- 1st Evaluator Rita Pacheco
- 2nd Evaluator Helena Gaspar
- 1st Alternate Evaluator Ricardo Melo
- 2nd Alternate Evaluator Maria Luisa Cyrne

#### V. Place of work

Work will be developed at the facilities of Research Center BiolSI, in C8 Building, FCUL, Campo Grande, Lisbon, Portugal.

#### **VI. Contract Duration**

The full-time employment contract with an uncertain term is expected to start on 1 March 2019, and will last until the Work Plan referred to in section III is completed. It will have an expected duration of 30 months, with a maximum duration of 6 years, including an initial experimental trial period of 60 days.

#### VII. Monthly Allowance

The gross monthly salary entitle is stipulated in clause 1 of article 5 of the Regulatory Decree No. 11-A/2017, of December 29<sup>th</sup>, corresponding to level 33 of the Consolidated Table of Allowances, as approved by Government Order No. 1553-C/2008, of December 31<sup>st</sup>, being 2,128.34 Euros, plus holiday and Christmas allowances, as well as food allowance, in value and conditions for workers with a legal relationship of employment under the Labour Code.

# VIII. Evaluation of applications

- 1. Failure to comply with the Admission Requirements implies the non-admission of candidates in absolute merit.
- 2. According to article 5 of the RJEC, the selection of the candidates approved in absolute merit will rely on the evaluation of their scientific and curricular achievements in the last five years, taking into consideration the quality and relevance of the scientific production, and the professional activity indicated as more relevant by the candidate, for the project.



- 3. The final classification of candidates is given on a scale of 0 to 100%.
- 4. Evaluation of the relative merit of candidates, will rely on the following criteria:
  - a) Scientific publications in the area 40 %;
  - b) International Meetings poster or other communications presentation -30%
  - c) Assessment of the references provided by the candidate 20 %;
  - d) Interview, if deemed necessary by the jury 10% (MÁXIMO).
- 5. The jury may decide to interview the two best ranked [in criteria a) to c) of paragraph 4)] candidates, for clarifications and improved explanations of curricular elements.
- 6. The jury shall deliberate by means of a roll-call vote based on the evaluation criteria.
- 7. Minutes of the jury meetings are drawn up, summarizing all relevant elements considered by jury members, as well as their individual votes and justifications.
- 8. After completion of the evaluation process, the jury will draw up a ranking of successful candidates with their classifications.
- 9. Hiring will be decided by the Chairman of the Board of Directors of FCiências.ID, based on the final jury recommendation.
- 10. The evaluation results will be published on the website of the FCiências.ID ("Concursos" tab). The candidates will be individually notified of the evaluation results by e-mail sent to the address indicated in the "Personal Data" section of the submitted form.
- 11. With the notification referred to in paragraph 10, the hearing phase of interested parties referred to in Article 121 *et seq.* of the CPA will begin, and last for ten working days.
- 12. The possible pronouncement of the candidate in a prior hearing must be addressed to the President of the jury and submitted in writing to <a href="mailto:fciencias.id@fciencias-id.pt">fciencias.id@fciencias-id.pt</a>. The President of the jury will convene a jury's meeting to produce the final decision, within thirty working days.
- 13. Within five working days of the final jury decision, the Board of Directors Chairman of FCiências.ID will approve it and the candidates will be notified.
- 14. The communication between FCiências.ID and the candidates will be electronic and will comply with the following rules:
  - a) At the time of electronic submission of any document namely in the case of paragraph no 11 the candidates must generate proof of "sent message".
  - b) FCiências.ID will send an email message acknowledging documents received to the email address used by the candidates, within two working days.
  - c) In case of absence of a confirmation receipt by FCiências.ID showing the possibility of technical problems that should neither be the responsibility of the candidate nor FCiências.ID the candidates should contact FCiências.ID, with the proof referred to in point (a), to ensure delivery and proper receipt of the documents concerned.

# IX. Compliance with public policies

- FCiências.ID actively promotes a policy of non-discrimination and equal access, so that no candidate can be privileged, benefited, disadvantaged or deprived of any right or exempt from any duty due to, inter alia, ancestry, age, sex, sexual orientation, marital status, family status, economic situation, education, social origin or condition, genetic heritage, reduced working capacity, disability, chronic illness, nationality, ethnic origin or race, territory of origin, language, religion, political or ideological beliefs and trade union membership.
- 2. Under the terms of D.L. No. 29/2001, of February 3, a disabled candidate has a preference in equal classification, which prevails over any other legal preference. Candidates must declare



their respective degree of disability, the type of disability and the means of communication / expression to be used in the selection process, under the terms of the above-mentioned diploma.

# X. Submission of Applications

- 1. The present call will be open from 1 February to 15 February 2019.
- 2. The application and all the required documents may be submitted in Portuguese or English.
- 3. Applications will be submitted online, through the electronic platform of FCiências.ID (http://concursos.fciencias-id.pt).
- 4. On the electronic platform, applicants will complete a *mandatory* section on Personal Data [name, address, date of birth, contact email, nationality and scientific identifiers] and upload files with the documents listed below:
  - i. Detailed curriculum vitae mandatory;
  - ii. A motivation letter clearly demonstrating that the candidate has an adequate profile for the position and fully complies with the Admission Requirements mandatory;
  - iii. Up to five publications relevant for the objectives of the Work Plan mandatory;
  - Digital copies of documents proving formal academic degrees (PhD) and/or other scientific and professional qualifications - original documents must be provided in case of actual recruitment- mandatory;
  - v. Other documents that candidates consider relevant for the assessment of their scientific merit, or to declare the personal situation in the cases covered in section IX-2 of this Notice *optional*.
- 5. By decision of the Chairman of the Board of Directors of FCiências.ID, candidates who do not submit the documents identified in paragraph 4 will not be admitted to the call. In case of doubts, the Chairman may also invite candidates to substantiate specific data or statements with official supporting documents, before accepting the candidates' submission.

This Public Note was approved by the jury on 17/01/2019.