

#3784

## Public Notice - International Selection Procedure

### PhD Scientific Researcher Recruitment (Initial Stage Researcher)

FCiências.ID/2021/DL57/BiolSI/19

**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 the project EPIRaft – ‘Contribution of neuronal membrane and lipid raft remodelling to the pathophysiology of mesial temporal lobe epilepsy (MTLE): insight into the beneficial effects of the ketogenic diet therapy’ (Ref. PTDC/SAU-PUB/28311/2017 e LISBOA-01-0145-FEDER-028311), financed by Fundação para a Ciência e a Tecnologia, I.P./MCTES through national funds (PIDDAC), co-financed by Programa Operacional Competitividade e Internacionalização, and by the European Regional Development Fund (ERDF) through the Programa Operacional Regional de Lisboa of Portugal 2020 or other programs that may follow, in the form of an indefinite duration fixed-term employment contract on an exclusive regime, 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>.

#### 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 Biomedical Sciences, Medicine, Veterinary Medicine, Pharmaceutical Sciences, Biochemistry, Biology, and akin areas. The successful candidate should demonstrate critical thinking, strong communication and collaborative skills and interest in working in a team within an interdisciplinary environment.

<sup>1</sup> Please note that Degrees obtained in foreign countries need a Portuguese Recognition issued by a Portuguese high degree Institution, according to the [Decree-Law nr. 66/2018](#), of August 16<sup>th</sup> and the [Ministerial Order nr. 33/2019](#), of January 25<sup>th</sup>. The presentation of such Recognition is mandatory for contract signature. More information can be obtained in: <https://www.dges.gov.pt/en/pagina/degree-and-diploma-recognition>

#### II. Preferential Requirements

**Preference** will be given, in a non-exclusive way, to candidates which demonstrate:

- To have proven experience in research in the fields of Neuroscience and/or Pharmacology, in particular Neurochemistry, Electrophysiology, Immunohistochemistry or Cellular and Molecular Biology, with application to the study of Epilepsy associated mechanisms, demonstrated with the authorship or co-authorship of research papers in international peer-reviewed journals.
- To have proven experience in generation ‘in vitro’ and implementation ‘in vivo’ of animal models of epilepsy in rodents (e. g. pilocarpine induced TLE) and subsequent behavioural evaluation of spontaneous recurrent seizures.
- To have proven experience in the analysis of membrane lipid domains through biophysical approaches and in the interpretation on mass spectrometry lipidomic analysis data.
- To be author/co-author of at least 5 scientific publications in international peer-reviewed journals indexed to InCites Journal Citation Reports, with preferably 2 of these publications in the scientific areas related to the experience required for this project.
- To have certification for animal experimentation by Direção-Geral de Alimentação e Veterinária (DGAV FELASA category B or C laboratory animal experimentation course)<sup>2</sup>.

<sup>2</sup> For application of foreign citizens, certification of equivalent level at European or international standards may be considered. Supporting documents of these conditions should be submitted with the application.

### III. Applicable Law

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

### IV. Work Plan

The Work Plan has as **main objective** to investigate the changes in the lipid composition and in the synaptic functional dynamics in MTLE-HS patients and in a rat model of TLE showing spontaneous recurrent seizures induced by pilocarpine treatment, as mentioned in activities of project PTDC/SAU-PUB/28311/2017.

The **specific tasks** to develop in the work plan are:

- a) To evaluate by biophysical techniques in synaptosomes obtained from the rat model of spontaneous recurrent seizures, and respective controls, changes in synaptic membrane domains (in particular 'lipid rafts') (Activity 6).
- b) To prepare acutely isolated hippocampal slices, organotypic hippocampal slices or neuronal cultures to perform and supervise experiments to evaluate the impact of epileptiform activity induced *in vitro* in hippocampal slices on lipid peroxidation in hippocampal membranes (Activity 7).
- c) To evaluate through molecular biology techniques (western blot) the changes in lipid raft and synaptic domain markers in both experimental models (Activity 3).
- d) To evaluate the changes in the lipid composition of the synaptic membranes by biochemical methods and through interpretation of the mass spectrometry lipidomic analysis performed in the animal model of TLE (Activity 4).
- e) To study the therapeutic impact of the ketogenic diet in the TLE rat model induced by Li<sup>2+</sup>-pilocarpine treatment (Activity 9).

These tasks contribute to the above-mentioned activities of the EPIRaft project PTDC/SAU-PUB/28311/2017.

### V. Composition of the Jury

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

- President – Doctor Diana Cunha Reis (BioISI e DQB, FCUL), Project IR;
- 1st Member of the jury – Professor Paulo Correia de Sá (ICBAS, UP);
- 2nd Member of the jury – Professor Margarida Gama Carvalho (BioISI e DQB, FCUL);
- 1st Alternate Member of the jury – Doctor Mark Gibson (BioISI, FCUL);
- 2nd Alternate Member of the jury – Doctor Fátima Ferreirinha (ICBAS, UP).

### VI. Place of work

Work will be developed at BioISI – Biosystems and Integrative Sciences Institute, Faculdade de Ciências da Universidade de Lisboa, Campo Grande, 16, 1649-016 Lisboa, Portugal, under the supervision of Doctor Diana Cunha Reis.

### VII. Contract Duration

The full-time indefinite duration fixed-term employment contract is expected to start on January 2022, and will last until the Work Plan referred to in section IV is completed. It will have an expected duration

of 5 months and will not exceed the limits set in the RCD, including an initial experimental trial period of 15 days.

### **VIII. Monthly Allowance**

The gross monthly salary is stipulated in clause 1 a) of article 15 of the RCD, corresponding to level 33 of the Single Remuneratory Table, as approved by Government Order No. 1553-C/2008, of December 31<sup>st</sup>, updated by the decree-law nr. 10-B/2020, of March 20<sup>th</sup>, being 2,134.73 Euros, on an exclusive regime, plus holiday and Christmas allowances, as well as food allowance, in the amount and conditions set out for workers with a legal employment relationship under the Labour Code.

### **IX. 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 RCD, 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 also into consideration the quality and relevance of the scientific production, and the professional activity indicated as more relevant for the project by the candidate.
3. Based on the assessment of the candidates' scientific and curricular background in the last 5 years, each member of the jury presents a justified proposal for admission (final classification equal to or greater than 40%) or exclusion (final classification below 40%) for each candidate, according to the evaluation criteria referred to in paragraph 5.
4. The final classification of candidates is given on a scale of 0 to 100%.
5. **Evaluation of the relative merit** of candidates, will rely on the following criteria:
  - a) Curricular evaluation (CE, 0 to 30%), which will be focused on the relevance, quality, and actuality of the presented elements, namely:
    - i. Academic path (e.g. BSc, MSc and PhD grades) (0 to 7.5%);
    - ii. Scientific output considered more relevant by the candidate (e.g. authorship/co-authorship of scientific publications in indexed journals, oral presentations and/or scientific panels in congresses, prizes, patents, etc.) (0 to 15%);
    - iii. Activities of extension and dissemination of knowledge considered of major relevance by the candidate (0 to 7.5%);
  - b) Adequacy of candidate's profile to the requirements of the project (PC, 0 to 60%), in particular its participation in scientific projects and publications with relevance in the scientific field of the project;
  - c) Appreciation of the references provided by the candidate and motivation letter (CM, 0 to 10%);
6. The jury may decide to interview the three best ranked candidates [in criteria a) to c) of paragraph 5)], for clarifications and improved explanations of curricular elements. If conducted, the evaluation of the interview will contribute 10% to the final classification of the candidate and the relative merit of the candidates obtained in point 5 will contribute 90%.
7. The jury shall deliberate by means of a roll-call vote based on the evaluation criteria, abstentions are not allowed.
8. Minutes of the jury meetings are drawn up, summarizing all relevant elements considered by jury members, as well as their individual votes and justifications.

9. After completion of the evaluation process, the jury will draw up a ranking of successful candidates with their classifications.
10. Hiring will be decided by the Chairman of the Board of Directors of FCIências.ID, based on the final jury recommendation.
11. 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.
12. With the notification referred to in paragraph 11, the hearing phase of interested parties referred to in Article 121 *et seq.* of the CPA will begin, and last for ten working days.
13. The possible pronouncement of the candidate in a prior hearing must be addressed to the President of the jury and submitted in writing to [concursos@fciencias-id.pt](mailto:concursos@fciencias-id.pt). The President of the jury will convene a jury's meeting to produce the final decision, within thirty working days.
14. Within five working days of the final jury decision, the Chairman of the Board of Directors of FCIências.ID will approve it and the candidates will be notified.
15. The communication between FCIências.ID ([concursos@fciencias-id.pt](mailto:concursos@fciencias-id.pt)) 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 12 - 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.

## **X. Compliance with public policies**

1. 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.

## **XI. Submission of Applications**

1. The present call will be open from the 15<sup>th</sup> to the 28<sup>th</sup> of December 2021.
2. The application and all the required documents (with all the information required in IX – point 5) 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* - **CV may be provided in PDF format or through the CIÊNCIAVITAE system.**
  - ii. A motivation letter that should also clearly demonstrate 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 - *optional*;
  - iv. 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 X-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 14/12/2021.