

#3517

## Public Notice - International Selection Procedure

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

FCiências.ID/2021/DL57/BioISI/3

**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’ with reference PTDC/SAU-PUB/28311/2017 (LISBOA-01-0145-FEDER-028311) and funded by national funds by FCT/MCTES (PIDDAC)/FEDER through Program in all Scientific Domains, 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 29th, 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 and presenting a scientific and professional CV revealing an adequate profile and experience to the activities to develop. Successful candidate should demonstrate critical thinking, strong communication and collaborative skills and interest in working in interdisciplinary environment.

Candidate should also fully comply with the following **special requirements**:

- a) To have certification for animal experimentation by Direção-Geral de Alimentação e Veterinária (DGAV; FELASA category B or C animal experimentation course)<sup>2</sup>;
- b) To have proved experience in research in the fields of Pharmacology and/or Neuroscience, in particular, with Neurochemistry, Electrophysiology or Cellular and Molecular Biology with application to the study of Epilepsy associated mechanisms.

**Preference** will be given to candidates which demonstrate to have the following experience through authorship/co-authorship of international peer-reviewed scientific publications:

- a) 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;
- b) Isolation and purification of nerve terminals from human or rat hippocampus and cortical tissue by differential centrifugation techniques;
- c) Evaluation of lipid-raft and synaptic domain protein markers in the above-mentioned preparations by molecular biology, immunocytochemistry, namely co-localization studies and confocal microscopy;
- d) Use of neurochemical and electrophysiological and/or imaging techniques to monitor changes in the uptake/release of neurotransmitters (e.g. GABA and glutamate) in hippocampal slices and/or hippocampal/cortical isolated nerve terminals from human or rat.
- e) To be author/co-author of at least 3 scientific publications in international peer-reviewed journals indexed to InCites Journal Citation Reports in areas related to the experience required for this project.

<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>.

<sup>2</sup> For application of foreign citizens, certification of equivalent level at European or international standards may be considered as long as they will be submitted to recognition by SPCAL within three months of the application deadline in this public notice. In the absence of eligible candidates with certification for animal experimentation the jury may consider applications from candidates that are in the process of obtaining this certification, but only if they commit to obtain it within three months of the application deadline in this public notice. Supporting documents of these conditions should be submitted with application.

## II. Applicable Law

1. Decree-Law No. 57/2016, of August 29th (RCD), in the wording conferred on it by Law No. 57/2017, of July 19th (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).

## III. 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 well as to evaluate the therapeutic value of the ketogenic diet in the animal model, as mentioned in activities of project PTDC/SAU-PUB/28311/2017.

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

- a) To implement and coordinate experimental activities necessary to the generation of a rat model of spontaneous recurrent seizures resembling human MTLE-HS induced by Li<sup>2+</sup>-pilocarpine treatment (Activity 1);
- b) To coordinate with the clinical services the collection and adequate preservation of control human samples (legal-medicine autopsies) and human epilepsy samples (from neurosurgery) (Activity 2);
- c) To evaluate the changes in lipid rafts (planar rafts and caveolae) and to study its correlation with the distribution of ion channels, neurotransmitter receptors and transporters, and other plasma membrane proteins through molecular biology techniques and immunohistochemistry in the brain of MTLE-HS patients and in the rat TLE model (Activity 3);
- d) To investigate the impact of the above-mentioned changes in the uptake and release of GABA and glutamate from isolated brain terminals of the human brain or of the rat model of TLE (Activity 8);
- 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).

Tasks b), c) and d) will be conducted at the partner institution ICBAS – Instituto de Ciências Biomédicas Abel Salazar (UP), Laboratório de Farmacologia e Neurobiologia do ICBAS-UP, Rua Jorge Viterbo Ferreira 228, 4050-313 Porto, Portugal, under the supervision of Professor Doutor Paulo Correia de Sá that has the necessary infrastructure and experience to implement them.

## IV. Composition of the Jury

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

- President – Doctor Diana Cunha Reis (BioISI, FCUL), Project IR;
- 1st Member of the jury – Professor Paulo Correia de Sá (ICBAS, UP);
- 2nd Member of the jury – Professor Maria da Graça Lobo (ICBAS, UP);
- 1st Alternate Member of the jury – Doctor José Bernardo Noronha-Matos (ICBAS, UP);
- 2nd Alternate Member of the jury – Doctor Fátima Ferreirinha (ICBAS, UP).

## **V. 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 Professora Doutora Diana Cunha Reis, with exception of tasks b), c) and d) as mentioned in point III of this public notice.

## **VI. Contract Duration**

The full-time indefinite duration fixed-term employment contract is expected to start on April 2021. It will have an expected duration of 9 months, including an initial experimental trial period of 30 days, and with maximum duration determined by the duration of the execution of the research project.

## **VII. Monthly Allowance**

The gross monthly salary entitle 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.

## **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 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 for the project of the scientific production, and the professional activity indicated as more relevant by the candidate.
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) 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%);
5. The jury may decide to interview the three best ranked candidates [in criteria a) to c) of paragraph 4)] candidates, 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 4 will contribute 90%.

6. The jury shall deliberate by means of a roll-call vote based on the evaluation criteria, abstentions are not allowed.
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 [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.
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. In case the candidate in the first position withdraws from the recruitment procedure, the candidate in the second position will be hired, and thus successively.
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 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**

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.

## X. Submission of Applications

1. The present call will be open from 12/03/2021 to 25/03/2021.
2. The application and all the required documents (with all the information required in VIII – point 4) may be submitted in Portuguese or English.
3. Applications will be submitted online, through the electronic platform of FCiências.ID (<http://concursos.fcencias-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 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 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 doubt, 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 11<sup>th</sup> March 2021.