

#### # 3472

### **Public Notice - International Selection Procedure**

### **PhD Scientific Researcher Recruitment**

# FCiências.ID/2021/DL57/BioISI/1

**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, funded by the Portuguese Science and Technology Foundation (FCT), in the form of an employment contract with an uncertain term, 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>, 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, Biomedical Sciences, Pharmaceutical Sciences, , Biology or 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). (Candidates currently obtaining the training and certification may be considered if they present a letter of commitment to the obtainence of the DGAV certification within three months from the expected start date of the contract in this public notice, after which FCiências.Id reserves the right to terminate the contract in case the certification was not obtained).
- b) To have proved experience in research in the fields of Neuroscience, in particular, with Neurochemistry, Electrophysiology or Cellular and Molecular Biology with application to the study of Epilepsy associated mechanisms.

The successful candidate should preferentially have also experience in at least one of the following topics:

- 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 and post-synaptic densities from human or rat hippocampus and cortical tissue.
- Evaluation of lipid raft proteins and synaptic domain protein markers by molecular biology techniques;
- d) Evaluation of changes in both fluidity, extent and stability of lipid domains by biophysical techniques;
- e) Preparation and experimentation in neuronal cultures or organotypic slice cultures.
- f) Use of electrophysiological techniques to evaluate neuronal signalling and activity.
- g) 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>&</sup>lt;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 <u>Decree-Law nr. 66/2018</u>, of august 16<sup>th</sup> and the <u>Ministerial Order nr. 33/2019</u>, of January 25<sup>th</sup>. The presentation of such Recognition is mandatory for contract signature. More information can be obtained in: <a href="https://www.dges.gov.pt/en/pagina/degree-and-diploma-recognition">https://www.dges.gov.pt/en/pagina/degree-and-diploma-recognition</a>.



# II. Applicable Law

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

- 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) and/or;
- b) To evaluate by biophysical techniques in synaptossomes obtained from the rat model of spontaneous recurrent seizures and respective controls changes in synaptic membrane domains (in particular 'lipid rafts').
- To prepare acutely isolated hippocampal slices, organotypical hippocampal slices or neuronal cultures to perform and supervise experiments to evaluate the impact of epileptiform activity induced *in vitro* in hippocampal slices in lipid peroxidation in hippocampal membranes (Activity 7);
- d) To perform experimental work to evaluate through immunocytochemical and molecular biology techniques (western blot) the changes in lipid raft and synaptic domain markers in either in the rat model of spontaneous recurrent seizures (Activity 3);
- 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).

The work plan is part of the above-mentioned activities of project PTDC/SAU-PUB/28311/2017.

# IV. Composition of the Jury

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

- President Doctor Diana Cunha Reis (BioISI, FCUL), Project IR.
- 1st Evaluator Professor Margarida Gama-Carvalho (BioISI, FCUL).
- 2nd Evaluator Professor Paulo Correia de Sá (ICBAS, UP).
- 1st Alternate Evaluator Doctor Rodrigo Almeida (CQE, FCUL).
- 2nd Alternate Evaluator Professor Francisco Pinto (BioISI, FCUL).

### V. Place of work

Work will be developed at the facilities of BioISI - BioSystems & Integrative Sciences Institute and ICBAS – Instituto de Ciências Biomédicas Abel Salazar (UP) at Faculty of Sciences, University of Lisbon, Campo Grande, 16, 1649-016 Lisbon and University of Porto, Rua de Jorge Viterbo Ferreira, 228, 4050-313 Porto, Portugal.



The full-time employment contract on an exclusive regime with an uncertain term is expected to start on February 2021 and will last until the Work Plan referred to in section III is completed. It will have an expected duration of 18 months, with a maximum duration of 6 years, including an initial experimental trial period of 30 days.

### VII. 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 excusive 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, 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) -7.5%.
    - 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.) -15%.
    - iii. Activities of extension and dissemination of knowledge considered of major relevance by the candidate 7.5%.
  - b) Adequacy of candidate's profile (PC) 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 60%.
  - Appreciation of the references provided by the candidate and motivation letter (CM)
     10%.
- 5. The jury may decide to interview the three best-ranked [in criteria a) to c) of paragraph 4)] candidates, for clarifications and improved explanations of curricular elements. The jury may decide not to perform an interview if the number of candidates complying with the specific requirements for admission to this call. 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.
- 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:concursos@fciencias-id.pt">concursos@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. 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 (<u>concursos@fciencias-id.pt</u>) 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.
- 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 8<sup>th</sup> to 21<sup>st</sup> of January, 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.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 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 mandatory;
- iv. Digital copies of documents proving formal academic degrees (PhD) and/or other scientific and professional qualifications (in particular DGAV certification or letter of commitment to its obtainment in the three-month period) - 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 7<sup>th</sup> of January, 2021.