

Call for tender

Open Call for PhD Research Fellowships

FCiências.ID - Associação para a Investigação e Desenvolvimento de Ciências, main management institution of BioISI-Instituto de Biosistemas e Ciências Integrativas opens a call for the awarding of 8 (eight) research fellowship(s), hereinafter designated by PhD Research Fellowships, in the area of Systems Biology and related areas, under the Research Fellowship Regulation (*Regulamento de Bolsas de Investigação da FCT - RBI*) and the Research Fellowship Holder Statute (*Estatuto do Bolseiro de Investigação - EBI*).

The fellowship(s) will be financed by *Fundação para a Ciência e Tecnologia (FCT)* under the Collaboration Protocol for Financing the Multiannual Research Fellowship Plan for Doctoral Students, signed between FCT and the R&D Unit Instituto de Biosistemas e Ciências Integrativas (BioISI), N.º 4046.

1. APPLICATION SUBMISSION

The call is open from June 22nd, 2021 to 23h59 (Lisbon time), of August 15th, 2021.

The applications, and all the supporting documents and the application form described in this Call for tender must be submitted via e-mail to biosysapply@fc.ul.pt.

Each applicant may submit only one application, under penalty of cancellation of all submitted applications.

Applicants providing false declarations or committing acts of plagiarism will be excluded from the application without prejudice of taking other corrective and punitive disciplinary measures.

2. TYPE AND DURATION OF FELLOWSHIPS

Aiming to support advanced training, PhD Research Fellowships will be granted to applicants that fulfil the requirements to join a study cycle that allows to obtain a PhD degree and that wish to develop research work that allows obtaining that degree.

The research activities leading to the attainment of the PhD degree will take place in BioSystems & Integrative Sciences Institute (BioISI), which will be the host institution of the fellowship holder, without prejudice the work can be carried out in collaboration with more than one institution.

The research activities leading to the attainment of the PhD degree must be integrated in the activities plan and strategy of BioISI in Systems Biology and Integrative Science, and should be developed under the following Doctoral Programs:

- Doctoral Program BioSys2
- In an adequate study cycle in Faculty of Sciences, University of Lisbon, in accordance with the projects listed in Annex I.

The work plan may be developed entirely or partially in a national institution (fellowship in Portugal or both in Portugal and abroad, respectively).

The duration of the fellowships is, as a rule, annual, renewable up to the maximum of four years (48 months) and cannot be granted for a period less than 3 consecutive months.

In the case of a fellowship carried out both in Portugal and abroad, the work plan period in a foreign institution cannot exceed 24 months.

3. RECIPIENTS

PhD fellowships are aimed to applicants enrolled or that comply with the requirements to enroll in the Doctoral Programme indicated in point 2 of this call and who wish to carry out research towards the attainment of the Doctor degree at BioISI, or in host institutions associated with it.

4. ADMISSIBILITY

4.1 Applicants' Admissibility Requirements

The following citizens may apply to this call:

- National citizens or citizens of other member states of the European Union;
- Third-country citizens;
- Stateless individuals;
- Citizens holding a political refugee status.

To apply for the PhD Research Fellowship, it is necessary:

- To hold a Degree or Master's degree in the areas of Biology, Biochemistry, Biotechnology, Computational Biology or related areas;
- To be a citizen permanently and usually living in Portugal, in case the work plan associated to the fellowship proceeds, entirely or partially, in foreign institutions (in case of both in Portugal and abroad fellowships); this requirement is applicable to both national and foreign citizens.
- Not to have benefited from a PhD or a PhD in industry fellowship directly funded by FCT, regardless of its duration.
- Not to hold a PhD degree.

4.2 Application's Admissibility Requirements

It is mandatory, under penalty of non-admissibility to the Call, to enclose the following documents to the

application:

- Elements of identity card/citizen card/passport;
- Applicant's *Curriculum vitae (CV)*, should provide the CV through the CIÊNCIAVITAE system ;
- Application form;
- Certificates of academic degrees held by the applicant, compulsorily specifying the final classification and, if possible, the classifications obtained in all subjects taken, or, in alternative, applicant's declaration of honor, confirming that the bachelor's or master's degree was completed by the end of the application deadline;
- Record of recognition of academic degrees awarded by foreign higher education institutions and record of the conversion of the respective final classification to the Portuguese classification scale, or, alternatively, the applicant's declaration of honor that he obtained recognition of the foreign degree equivalent to that of graduate or master by the end of the application period;
- Motivation letter (1 A4 page maximum);
- Recommendation letter (2);
- To submit the application and all related documents, including motivation and recommendation letters in English.

Regarding the above mentioned admissibility requirements, the following should be noted:

- In the case of academic degrees awarded by foreign higher education institutions, and in order to ensure the application of the principle of equal treatment to applicants holding foreign and national academic degrees, it is mandatory to recognize these degrees and convert the respective final classification for the Portuguese rating scale.
- The recognition of foreign academic degrees and diplomas, as well as the conversion of the final classification to the Portuguese classification scale can be requested at any public higher education institution, or at the Directorate-General for Higher Education (DGES, only in the case of automatic recognition). Regarding this matter, it is suggested to consult the DGES portal at the following address: <http://www.dges.gov.pt>.
- Only applicants who have completed the cycle of studies leading to a Bachelor's or Master's degree by the end of the application period will be admitted. If they do not yet have a certificate of course completion, a declaration of honor from the applicants that they have completed the necessary qualifications for the purposes of the competition will be accepted by the end of the application deadline. The granting of the fellowship is always dependent on the presentation of proof of ownership of the academic qualifications necessary for granting the fellowship.

5. WORK PLANS AND SCIENTIFIC ORIENTATION OF THE FELLOWSHIPS

The workplan will focus on a research project towards the PhD degree, in the scope of projects and supervisors listed in Appendix I.

The research activities should be aligned with BioISI strategic plan on Systems Biology and Integrative Sciences.

6. EVALUATION CRITERIA AND BONUSES

6.1 Evaluation Criteria

The evaluation considers the applicant's merit and, for the best ranked candidates, an interview to assess their suitability to the project .

Based on the evaluation of the candidates' scientific and curricular background, the panel, in accordance with the evaluation criteria mentioned below, presents a justified proposal for admission (final classification equal to or greater than 75%) or exclusion (final classification less than 75%), on absolute merit, for each of the candidates.

Applications considered admissible will be scored on a scale of 0 (minimum) - 5 (maximum) on each of the following evaluation criteria:

- Criterion A – Candidate's merit, with a weight of 70%, considering:
 - Subcriterion A1 – Academic merit, with a weight of 60%
 - Subcriterion A2 – Personal CV/ research experience, with a weight of 35%
 - Subcriterion A3 – Motivation letter, with a weight of 5%
- Criterion B – Scientific potential and adequacy to the project, with a weight of 30%.

For subcriterion A1 will be considered the following assessment table:

<u>Graduate + Master degrees</u> (pre- or post-Bologna) or <u>Integrated Master degree</u> (300-360 ECTS)		<u>Graduate degree (180 ECTS)</u> (pre- or post-Bologna)		<u>Master degree (90-120 ECTS)</u> (pre- or post-Bologna)	
Final Grade	A1 Score	Final Grade	A1 Score	Final Grade	A1 Score
≥ 18	5.0	≥ 17	3.5	≥ 17	3.0
17	4.5	16	3.0	16	2.5
16	4.0	15	2.5	15	2.0
15	3.5	14	2.0	14	1.5
14	3.0	<14	1.5	< 14	1.0
<14	2.5				

For the purpose of the decision on granting fellowships, applicants will be ranked according to the weighted average of the classification obtained in each of the criteria, translated by the following formula:

$$Final\ classification(1) = 0.7 X (0.6 \times A1 + 0.35 X A2 + 0.05 X A3) + 0.3 X B$$

For tie-breaking purposes, the ranking of applicants will be based on the scores assigned to each of the evaluation criteria in the following order: criterion A, criterion B.

The 3 best ranked candidates or the best 25% (whichever smaller) to each project will be invited to an interview to assess their scientific quality and adequacy to the project(s). In the interview, the project supervisors will be present to allow the evaluation panel to better assess the adequacy of the candidate (the supervisor will not be present at any evaluation panel meeting and will not take part in the selection of the best applicant). The interview will also be evaluated in a range 0-5.

Final classification will be obtained using the following criteria:

Criterion C – Previous classification (65%)

Criterion D – Interview (35%)

Final ranking of the applicants for each project will be obtained using the formula:

$$\text{Final Grade (2)} = 0,65 \times C + 0,35 \times D$$

For tie-breaking purposes, the ranking of applicants will be based on the scores assigned to each of the evaluation criteria in the following order: criterion C, criterion D.

Important notice for applicants with degrees issued by foreign higher education institutions:

- Applicants with diplomas issued by foreign higher education institutions can apply and will be evaluated with the same criteria as applicants with diplomas issued by Portuguese institutions, provided that they present, in their application, proof of recognition of academic degrees and conversion of the final classification for the Portuguese classification scale in accordance with the applicable legislation.
- Applicants with foreign diplomas who do not present proof of conversion of the final classification to the Portuguese Based on the evaluation of the candidates' scientific and curricular path, the panel, in accordance with the evaluation criteria mentioned below, presents a justified proposal for admission (final classification equal to or greater than 75%) or exclusion (final classification less than 75%), on absolute merit, for each of the candidates. In any case, fellowship contracts with applicants with diplomas issued by foreign institutions will only be concluded upon presentation of proof of recognition of academic degrees and conversion of the final classification, as indicated above.

Applicants whose application is scored with a final classification of less than 2.5 points in criterion A are not eligible for granting a fellowship.

6.2 Bonus

Not applicable.

7. EVALUATION

The applicants' evaluation panel is composed by the following elements :

- Maria José Calhorda, Professora Catedrática Jubilada, BioISI, FC – ULisboa (panel coordinator)
 - Nuno Santos, Professor Associado com Agregação, IMM, FM – ULisboa
 - André Falcão, Professor Associado, LASIGE, FC – ULisboa
 - Filipa Mendes, Investigadora Auxiliar, c2TN, IST – ULisboa
 - Hélia Cardoso, Investigadora Auxiliar Convidada, MED – Univ Évora

The evaluation panel will assess the applications according to the evaluation criteria indicated in this Call, considering the elements of assessment.

All panel members, including the Head coordinator, are committed to respect a set of responsibilities essential to the evaluation process, such as the duties of impartiality, the declaration of any potential conflict of interest situations and confidentiality. At all times during the evaluation process, confidentiality is fully protected and ensured in order to guarantee the independence of all opinions produced.

Panel members, including the coordinator, cannot be advisors or co-advisors of applicants with applications submitted to this Call.

For each application, a final evaluation form will be produced by the panel where the arguments that led to the classifications attributed to each of the evaluation criteria and sub-criteria are presented in a clear, coherent and consistent way.

Meeting minutes will be produced from the evaluation panel meetings, under the responsibility of all its members.

The minutes and their attachments must include the following information:

- Name and affiliation of all evaluation panel members;
- Identification of all excluded applications and reasoning respective reasons;
- Methodology adopted by the panel for cases considered to be particular;
- Final Evaluation Sheets for each applicant;
- Provisional ranking list and seriation of applicants, in descending order of the final ranking, of all applications evaluated by the panel;
- Conflict of interest statements by all panel members;
- Possible delegations of vote and competences due to excused absence.

8. RESULTS DISCLOSURE

The evaluation results are communicated to the email address used by the applicant to send the application/indicated in the application.

9. TERMS AND PROCEDURES FOR PRIOR HEARING, CLAIM AND APPEAL

Once the provisional ranked list of the evaluation results has been communicated, applicants who have an unfavorable provisional decision may use their right to dispute it during the preliminary hearing phase, which takes place within 10 working days, according to Articles no. 121 and the following of the Administrative Procedure Code (CPA).

The final decision will be disclosed after the analysis of the applicants' arguments presented during the preliminary hearing. Final decision can be claimed within 15 working days or, alternatively, appealed within 30 working days, after the communication of the final results, respectively. Applicants who choose to submit a complaint must address their statement to the member of the Board of Directors of the FCT with delegated competence. Applicants who choose to present an appeal must address it to the FCT Board of Directors.

10. FELLOWSHIP GRANTING REQUIREMENTS

Research fellowship contracts are signed directly with the FCT.

The following documents are of mandatory submission, upon conditional granting of the studentship for purposes of contracting thereof:

- a) Copy of the civil, fiscal and, when applicable, social security identification document(s)¹;
- b) Copy of the academic degree certificates;
- c) Presentation of the registration of recognition of foreign academic degrees and conversion of the respective final classifications to the Portuguese classification scale, if applicable;
- d) Document proving the acceptance and registration in one of the Doctoral Programs identified in this call;
- e) Supervisor(s) statement declaring to coordinate the work plan, as established in Article no. 5-A of the
- f) Statute for Research Fellowships (template will be made available by FCT); Institutional document supporting the applicant, issued by the institution(s) where the work plan will be carried out, guaranteeing the necessary conditions to its successful development, as well as the fulfilment of the duties established in Article no. 13 of the Research Fellowship Holder Statute (template will be made available by FCT);
- g) Updated document proving the exclusivity dedication regime (template will be made available by FCT).

The granting of the fellowship is still dependent on:

- The fulfilment of all the requirements listed in this Opening Call;
- the results of scientific evaluation;
- the absence of unjustified non-compliance with the fellowship holder during previous s directly or indirectly FCT funded fellowships;
- FCT available budget.

¹ The availability of these documents can be replaced, at the applicant's option, by presentation in person at the funding entity, which will keep the elements contained therein that are relevant to the validity and execution of the contract, including the civil, fiscal and security identification numbers and the validity of the respective documents.

The lack of any of the necessary documents to complete the contracting procedure implies the expiration of the fellowship granting and conclusion of the process; applicants have up to 6 months after the disclosure of the provisional granting to present all of the listed documents.

11. FUNDING

Fellowship's payment will start after returning the signed contract to FCT, which should happen within the 15 working days after its delivery.

The fellowships awarded under this call will be financed by FCT using the State Budget fund and, whenever eligible, using the European Social Fund (ESF), under the PORTUGAL2020 Programme, in particular, under *Programa Operacional Regional do Norte (NORTE 2020)*, *Programa Operacional Regional do Centro (Centro 2020)* and *Programa Operacional Regional do Alentejo (Alentejo 2020)*, or any other funding schemes that might be approved, according to the respective requirements.

12. FELLOWSHIP COMPONENTS

A monthly maintenance allowance is granted to fellowship holders, in accordance with the table in Annex I of the RBI. The fellowship may also include additional allowances, according to RBI's Article no. 18 and the values indicated in its Annex II.

All fellowship holders have a personal accident insurance related to the research activities, supported by the FCT.

All fellowship holders who are not beneficiaries of any social protection regime can use the right to social security through the voluntary social insurance regime, under the terms of the Contributory Scheme of the Social Security System. FCT will ensure the charges resulting from contributions under the terms and within the limits provided in Article 10 of the EBI.

13. PAYMENT OF THE FELLOWSHIP COMPONENTS

Payments due to the fellowship holder are made by bank transfer to the respective indicated account. The monthly maintenance allowance is paid on the first working day of each month.

Registration, enrolment or tuition fees components are payed directly by FCT to the national institution where the fellowship holder is enrolled in the PhD programme.

14. TERMS AND CONDITIONS of PhD FELLOWSHIP RENEWAL

The renewal of the fellowship always depends on the fellowship holder submission, within 60 working days prior to the renewal start date, of the following documents:

- a) declaration issued by the supervisor(s) and by the host institutions(s) attesting the work plan development and the evaluation of the respective activities;
- b) updated document proving compliance with the exclusive dedication regime;
- c) Declaration demonstrating the enrolment renewal in the study cycle leading to the PhD degree.

15. INFORMATION AND PUBLICITY OF THE GRANTED FUNDING

All the R&D activities carried out by the fellowship holder, directly or indirectly financed by the fellowship, namely communications, publications and scientific creations, as well as thesis, must include the reference to FCT and European Social Fund (ESF) financing. In particular, these references should mention the following operational programs: *Programa Operacional Regional do Norte (NORTE 2020)*, *Programa Operacional Regional do Centro (Centro 2020)* and *Programa Operacional Regional do Alentejo (Alentejo 2020)*, or additional funding schemes that might be approved. Insignia of FCT, MCTES, ESF and EU must therefore be included in the documents referring to these actions, according to the graphic rules of each operational program.

The disclosure of research results funded according to the RBI provisions must comply with the open access guidelines, publications and other research results in accordance with FCT rules. For all the fellowships, in particular in case of European funded actions, namely the ESF, may be performed monitoring and controlling actions by national or European entities according to the applicable legislation.

Fellowship holders must therefore collaborate and provide all the required information, including answering to surveys and evaluation studies in this area, even though the fellowship might have already ceased.

16. NON-DISCRIMINATION AND EQUAL ACCESS POLICY

FCT promotes a policy of non-discrimination and equal access, thus no applicant may be privileged, benefited, damaged or deprived of any right or exempt from any duty. This includes ancestry, age, sex, sexual orientation, marital status, family situation, economic situation, education, origin or social condition, genetic heritage, reduced work capacity, disability, chronic disease, nationality, ethnicity or race, land of origin, language, religion, political or ideological beliefs or trade union affiliation.

17. APPLICABLE LEGISLATION AND REGULATIONS

The present Call is governed by this Opening Notice, the FCT Regulation of Research Fellowships, approved by the Regulation no. 950/2019, published in the Series II of the DR, of 16th of December, by the Research Fellowship Holder Statute, approved by Law no. 40/2004, of 18th of August, in its current version, and by other applicable national and European legislation.

FCT also recommends the careful reading of all the documentation supporting the application, namely, the Application

Guide and the Evaluation Guide, available at FCT website at:
<https://www.fct.pt/apoios/bolsas/concursos/individuais2021.phtml.en> .

Annex I

2021 BioSys2 Projets

1 – ASYMMETRIC* - Title: Asymmetric post-translational modifications (PTMs) as a new regulatory mechanism in self-associating signaling proteins, Supervisor: Federico Herrera (BioISI) | Co-supervisor: Veit Schwämmle (University of Southern Denmark)

2 – IMPACTTitle* - The impact of energy metabolism of Staphylococcus aureus on bacterial and host cellular processes, Supervisor: Manuela M. Pereira (BioISI) | Co-supervisor: Margarida D. Amaral (BioISI, FCUL)*

3 – CFTR-DIFF-EMT - Title: Role of CFTR in Epithelial Differentiation and EMT by functional genomics, Supervisor: Margarida Amaral (BioISI, FCUL) | Co-supervisor: Ines Pankonien (BioISI, FCUL) & Emanuel Gonçalves (Ophiomics)

4 - Link cAMP4CFTR* - Title: Linking cyclic AMP to the cytoskeleton to regulate CFTR trafficking, Supervisor: Carlos M Farinha (BioISI, FCUL) | Co-supervisor: Manuela Zacco (University of Oxford, UK)

5 - Grape Trunk - Title: Molecular and metabolic markers of Grapevine Trunk diseases, Supervisor: Ana Margarida Fortes (BioISI, FCUL) | Co-supervisor: Paula Lopes (BioISI, UTAD) & Rita Pacheco (BioISI, FCUL)

6 - DNA MPB* - Title: DNA methylation role in the periderm barrier formation, Supervisor: Célia Miguel (BioISI, FCUL) | Co-supervisor: Stéphane Maury (Université d'Orléans) & Vera Inácio (BioISI, FCUL)

7 - InSilico 4 Protein Knots* - Title: In silico insights on the role of protein knots in mechanical stability and self-association, Supervisor: Miguel Machuqueiro (BioISI, FCUL) | Co-supervisor: Patrícia Faísca (BioISI, FCUL)

8 – GvagainstDM* - Title: The effects of different regenerative agriculture practices on soil and plant microbiome: a study of its effects on grapevine defense system against downy mildew, Supervisor: Andreia Figueiredo (BioISI, FCUL) | Co-supervisor: Fiammetta Alagna (ENEA, Italy) & Bernardo Duarte (MARE, FCUL)

* Mixed Fellowship (sponsors max 2yrs at an international institution through salary increase)