



**INVESTIGADOR  
FCT**

# Evaluation Guide

## 2013 FCT INVESTIGATOR GRANTS

01 August 2013

# 1.

## INTRODUCTION

This document outlines the reviewing process of the call for FCT Investigator grants, inputs and outputs, and defines the responsibilities of the participants in the process. It details a number of important issues, such as: the mission of FCT; objectives of this call and application components; evaluation criteria; scoring system; evaluation process; feedback to applicants; confidentiality and conflict of interest.

### The mission of FCT

*Fundação para a Ciência e a Tecnologia* (FCT), the Portuguese Foundation for Science and Technology, is the Portuguese public Research Council that funds all scientific areas of science and technology.

FCT promotes excellent science, technology, innovation and international competitiveness across all areas of scientific research.

FCT supports, funds and assesses people (including grants, fellowships, studentships and contracts), ideas (research grants) and internationally competitive research centres. FCT aims to: promote research talent through sustainable advanced training and scientific careers of excellence; foster international competitiveness and visibility of scientific research and innovation carried out in Portugal; encourage knowledge transfer between R&D centres and businesses; facilitate access of the scientific community to state-of-the-art infrastructures and support the development of internationally leading research centres.

The main functions of FCT are:

- to promote, evaluate, fund and accompany research units, programmes, projects and qualification of human resources;
- to promote and support infrastructures for scientific research and technological development;
- to promote the diffusion of scientific and technological culture and knowledge;
- to stimulate the update, interconnection, reinforcement and availability of science and technology information sources.

FCT funds all areas of knowledge, including exact, natural and health sciences, engineering, social sciences and humanities.

## 2. CALL FOR FCT INVESTIGATOR GRANTS

As part of its strategy to promote scientific excellence, FCT launched the first edition of an international call for the recruitment of researchers (FCT Investigator Grants) in 2012. For the 2013 call, the number of positions available is 150.

The typical profile of the FCT Investigator corresponds to highly motivated scientists seeking to develop, conduct and coordinate top quality research activities in Portugal.

This call is aimed at researchers holding a PhD degree. The grants are divided into three levels, corresponding to different stages of the scientific career:

- a) **“Starting grant”**, aimed at PhD holders with more than 3 years and less than 8 years post-PhD experience at the time of application, with no need for previous experience of scientific independence;
- b) **“Development grant”**, aimed at PhD holders with a curriculum of exceptional merit and experience as an independent researcher;
- c) **“Consolidation grant”**, aimed at PhD holders with experience as an independent researcher, with a curriculum of exceptional merit and evidence of scientific leadership in a particular area of knowledge.

Independent researchers are scientists who have already established themselves as internationally recognised experts or leaders in their own right, often as Principal Investigators or Group Leaders, supervising a research team and attracting competitive funding from FCT or other national and international funding agencies.

In the 2013 call, a tolerance of 11 months is given to applicants to starting grants. For example, eight years after PhD completion may mean eight years and 11 months.

Each applicant cannot create more than one application and it is the applicant’s responsibility to choose the appropriate type of grant to apply to.

### Application Components

Applications are submitted online via a dedicated FCT Web application. Submission of the full proposal is followed by a one-step evaluation process.

The three main items to be provided in the application are **curriculum vitae**, a **research project** and a **career development plan**. All of these elements will be subject to evaluation.

The application form is organised in sections, some of which are optional. The sections to be filled in are the following:

### **Description of the application form**

#### **A. Executive summary**

Major contributions/Highlights

- A1. Synopsis of CV/ Major accomplishments
- A2. Synopsis of the research project and career development plan
- A3. Number of years after completion of PhD
- A4. Justification for deviations (if applicable)

#### **B. Full description of the application**

B1. Research project

- Background
- Research plan and methods
- Expected outcomes/ Impact
- Major references

B2. Career development plan

- Career objectives
- Development/ Consolidation of an independent career
- Networking/ Internationalisation plans

#### **C. Ethical and legal issues**

#### **D. Host institution**

- D1. Select the host institution
- D2. Description of the host conditions

#### **E. Supporting materials**

The extended CV, as featured on the FCT-SIG system, is an integral component of the application. **However, applicants should be aware that the reviewers may choose to consider only the information presented in the synopsis of CV/Major accomplishments.**

Applicants identify, from a given list (OCDE's adopted Field of Science and Technology (FOS) classification), the primary and secondary scientific areas of the project, and specify 5 keywords that most accurately reflect the scientific content of the proposed project.

It is the applicant's responsibility to identify the **host institution** and to obtain the required agreement to carry out the scientific project and the career development plan. The host institutions commits to provide



all resources, including materials, support services, critical mass and institutional policies to ensure the implementation of the research project and career development plan.

There is **no pre-established structure to describe the research project and career development plan**, which can be different for different career paths and research profiles. To facilitate the application, the form contains predefined text boxes that describe the key points of the application. However, applicants can always choose to ignore the titles indicated and provide a title that describes the contents on the text boxes more appropriately.

### 3. EVALUATION CRITERIA

The evaluation and selection process will use five criteria for the three components of the application under evaluation. The table below presents these criteria, and respective sub-criteria, for the different components of the application: CV, research project and career development plan.

**Table 1. Evaluation criteria used for each application component and their relative weights**

Application Components	Evaluation Criteria
<p><b>CV</b> <b>(50%)</b></p>	<p style="text-align: center;"><b>1. Scientific Merit of the Applicant</b></p> <ul style="list-style-type: none"> <li>i) Scientific productivity of the applicant evaluated according to criteria accepted internationally by the different scientific communities;</li> <li>ii) Abilities and skills to adequately execute the proposed project;</li> <li>iii) Degree of internationalisation;</li> <li>iv) Innovative and creative nature of the achievements listed by the applicant;</li> <li>v) Degree of success in previous calls for grant applications/ projects;</li> <li>vi) Experience of doctoral and post-doctoral supervision;</li> <li>vii) Overall suitability of the research profile for the intended grant level.</li> </ul>
<p><b>Research Project</b> <b>(35%)</b></p>	<p style="text-align: center;"><b>2. Scientific Merit &amp; Innovative Nature</b></p> <ul style="list-style-type: none"> <li>i) Relevance and originality of the proposed project (based on the state-of-the-art in a given scientific area and previous work carried out by the applicant);</li> <li>ii) Innovative nature of the idea underlying the research project;</li> <li>iii) Objectives that allow considerable progress beyond the current state-of-the-art;</li> <li>iv) Adequacy of the adopted methodology and feasibility of the workplan;</li> <li>v) Production of innovative knowledge that will contribute to benefit society or the business sector.</li> </ul>

	<p style="text-align: center;"><b>3. Host conditions &amp; Feasibility</b></p> <p>i) Feasibility and conditions granted by the host institution to support the research project and the career development plan.</p>
<p style="text-align: center;"><b>Career Development Plan</b></p> <p style="text-align: center;"><b>(15%)</b></p>	<p style="text-align: center;"><b>4. Strategic Planning</b></p> <p>i) Organisation and structure of the career development plan.</p>
	<p style="text-align: center;"><b>5. Conditions for Independent Research</b></p> <p>i) Adequacy of the career development plan and prior achievements towards research independence.</p>

Indicators for **scientific merit of the applicant** include the main academic and professional degrees, publications in top speciality peer-reviewed journals and/or in major multidisciplinary international peer-reviewed journals. Equivalent contributions/indicators from areas where international peer-reviewed publications are not available or are not common practice should be provided and explained (for example, peer-reviewed conference proceedings and/or monographs on specific research fields). Other relevant indicators include competitive funding from national and international funding agencies, granted patents, chapters in books, performances and exhibitions (to the extent that they embody research), supervision of doctoral and post-doctoral students, prizes, honours and awards.

The applicant should also provide objective information that helps the panel to assess if and for how long he/she has been working as an independent investigator.

Examples of conditions offered by host institutions valued in this grant scheme include: technical and administrative support staff, adequate laboratory and office space, and access to infrastructures.

## 4. SCORING SYSTEM

The current FCT scoring system uses a 9-point scale:

Impact	Score	Additional Guidance on Strengths/Weaknesses
High	9	Exceptionally strong with essentially no weaknesses
	8	Extremely strong with negligible weaknesses
	7	Very strong with only some minor weaknesses
Medium	6	Strong but with numerous minor weaknesses
	5	Strong but with at least one moderate weakness
	4	Some strengths but also some moderate weaknesses
Low	3	Some strengths but with at least one major weakness
	2	A few strengths and a few major weaknesses
	1	Very few strengths and numerous major weaknesses

A score of 9 indicates an exceptionally strong application with essentially no weaknesses. A score of 1 indicates an application with serious and substantive weaknesses with very few strengths; 5 is considered an average score.

The impact scale considers the research project and career development plan's likelihood to have a sustained, powerful influence or strong impact on the research field(s) involved:

- High impact = 7 to 9;
- Medium impact = 4 to 6;
- Low impact = 1 to 3.

The Panel may use the impact scores to decide which applications will be discussed in detail at the panel meeting.

## 5. EVALUATION PROCESS

### MAIL REVIEW

The eligible applications will be evaluated by at least two mail reviewers prior to the panel meeting. **Mail reviewers** will produce an evaluation report for each application, to be forwarded to the evaluation panels.

Individual mail reviewing includes:

- Applying the evaluation criteria and sub-criteria to rate each component. The reviewers have to score each evaluation sub-criterion using the FCT 9-point scale with whole numbers only (no decimal ratings are accepted). The score given to each criterion will be the weighted average of the scores of the different sub-criteria. The final score for each application will be calculated taking into account the different weights given to each component of the application.
- Providing a global explanatory comment. This statement should fully explain the evaluator's judgment on the proposal and provide recommendations regarding the research project.

The scores and comments of the mail reviewers are both critically important because they are the starting point for the panel discussions. These comments may be reported to the applicants and should be succinct but of substance, as well as impeccably polite.

At least two reports per application are produced and forwarded to the **Evaluation Panels**. However, FCT will make efforts to ensure that each proposal is evaluated by three mail reviewers.

### EVALUATION PANELS

There will be an evaluation panel for each of the following scientific domains: **Life Sciences (LS)**, **Physical Sciences and Engineering (PE)**, and **Social Sciences and Humanities (SH)**. The panel members will have access to all applications within each scientific domain, as well as to the corresponding mail reviewers' reports. The panel members will analyse both full applications and reports from mail reviewers.

The Chairs of the Evaluation Panels will lay down the procedures to be followed and the tasks of the respective members. Unless otherwise indicated by the Chairs, the Evaluation Panels will select the top applicants for the number of positions available and will also prepare a reserve list.



Each of the three components of the application are rated using the 9-point scale with whole numbers only (no decimal ratings). Additionally, an overall rating of the application is required. The overall rating reflects the Panel's judgment on the application and does not result from an arithmetic formula applied to the scores given to each component.

The Evaluation Panel must ensure that each application receives a fair judgment and is discussed appropriately. The objective of the meeting is to determine the final selection and produce a consolidated ranking list of the applications that were scored equal or above 7.00. Moreover, the Evaluation Panels decide which applications are to be discussed in detail based on the scores of the mail reviewers.

Each application above the panel threshold will be individually evaluated by two panel members, and one of the panel members will be designated as the panel reader (*rapporteur*). The panel reader is responsible for writing the panel evaluation report of the application.

The applications discussed in detail by the panel will receive an summary evaluation statement. Those that are not discussed in detail will receive the scores and comments from the mail reviewers.

## **MEETING ACTIVITIES**

The **undertakings of the Evaluation Panels are:**

- To generate a consolidated ranking list of applications that were scored equal or above 7.00 and to recommend those to be funded;
- To elaborate an summary evaluation statement for the applications that were discussed in detail, based on the respective evaluation of the panel reader (*rapporteur*);
- Prepare a report with a summary of the meeting and comments regarding the evaluation process.

## 6. FEEDBACK TO APPLICANTS

All the reviewers are encouraged to observe the **following additional guidelines**:

- Avoid comments that give a description or a summary of the proposal.
- Avoid the use of the first person or equivalent: "I think..." or "This reviewer finds...".
- Always use dispassionate and analytical language: avoid dismissive statements about the applicant, the proposed science, or the scientific field concerned.
- Avoid asking questions, as the applicant will not be able to answer them.
- Evaluate the proposed work and not the work you consider should have been proposed.

In the case of a very large number of proposals, some standardisation of the comments may be implemented.

## 7. CONFIDENTIALITY AND CONFLICT OF INTEREST

### Confidentiality

The confidentiality of written proposals must be protected. All experts involved in the evaluation are asked not to copy, quote or otherwise use material from the proposals. Experts are requested to sign a statement of confidentiality regarding the contents of the project proposals and to the results of the evaluation.

The text requiring acceptance, which appears the first time each reviewer uses his/her username and password to access the evaluation area, is the following:

#### STATEMENT OF CONFIDENTIALITY

Thank you for accepting to participate in the scientific evaluation of FCT Investigator Grants submitted to the *Fundação para a Ciência e a Tecnologia* - FCT.

The reader of this message pledges, on his/her honour, not to quote or in any way use the contents of the applications, nor to make available, other than to FCT or to the Evaluation Panel, the results of the evaluation.

### Conflict of interest (Col)

Reviewers that have submitted an application to the present call, have to decline participating in the evaluation process.

Any Col must be declared prior to the evaluation process. No reviewer shall make an individual review of a proposal if a Col situation arises .

Circumstances that could be interpreted as a **disqualifying conflict of interest** are laid down in the following criteria:

1. First-degree relationship, marriage, life partnership, domestic partnership;

2. Personal interest in the application's success or financial interest by persons listed under no.1;
3. Current or planned close scientific cooperation;
4. Dependent employment relationship or supervisory relationship (e.g. teacher-student relationship up to and including the postdoctoral phase) extending five years beyond the conclusion of the relationship;
5. The affiliation or pending transfer to this or to a participating institution;
6. Researchers who are active in a council or similar supervisory board of the applicant's institution are excluded from participating in the review and decision-making process for applications coming from that institution;

**A potential conflict of interest** may exist, even in cases not covered by the clear disqualifying conflicts indicated above, in the following circumstances:

7. Relationships that do not fall under no. 1, other personal ties or conflicts;
8. Financial interests of persons listed under no. 7;
9. Participation in university bodies other than those listed under no. 6, e.g. in scientific advisory committees in the greater research environment;
10. Research cooperation within the last three years, e.g. joint publications;
11. Preparation of an application or implementation of a project with a closely related research topic (competition);
12. Participating in an on-going scientific or inter-personal conflict with the applicant(s).

In the latter case, FCT will make a decision whether the situation in question constitutes an actual Col - or whether no Col exists.



**INVESTIGADOR  
FCT**

**WWW.FCT.PT**