

Fundação para a Ciência e a Tecnologia

**Harvard Medical School – Portugal Program
in Translational Research and Information**

**Terms of Reference for the
2012 Calls for Proposals**

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Themes for the Call for Proposals

This document provides relevant information to the 2012 Calls for Proposals for the Harvard Medical School – Portugal Program in Translational Research and Information by the Fundação para a Ciência e a Tecnologia (FCT).

Regulations governing access to funding are available at:

<http://www.fct.pt/apoios/projectos/regulamentos>

<http://www.fct.pt/apoios/projectos/normasexecucaofinanceira>

<http://www.fct.pt/apoios/bolsas/normasbolsasemprojectosunidades>

The announcement of the opening of each call is available at:

<http://www.fct.pt/apoios/projectos/concursos/>

The guides to writing and submitting proposals are available at:

<http://www.fct.pt/apoios/projectos/concursos/docs/guiao>

<http://www.fct.pt/apoios/cooptrans/parcerias/harvard/>

1: Clinical and Translational Research Grants

Research in biomedical sciences that targets disease mechanisms and outcomes may be divided into several overlapping areas. **Translational** research focuses on the areas of biology that impinge on human health and the understanding of disease mechanisms, and on the application of this research toward a particular medical challenge. **Clinical** research aims to understand disease and health by directly observing and experimenting on patients. Both areas of research are required to promote the effective application of basic knowledge into patient needs. The Clinical and Translational Collaborative Research Grants are designed to enhance and enlarge the clinical and translational research infrastructure in Portugal and to promote collaboration not only within Portugal but also internationally. The research topics to be considered in these calls should be patient and/or disease oriented and the translational and/or clinical outcomes should be clearly stated. It is expected that, through a range of scientific approaches, the Collaborative Research Grants will focus on questions relevant to medicine at the frontier of translational and clinical sciences.

Successful competitive proposals must involve a collaborative effort between (at least) two Portuguese research teams from different legally defined institutions and (at least) one research team from Harvard Medical School, institutions affiliated with Harvard Medical School and/or other Harvard faculties and schools. There will be one call for grant applications in each of the first four years of this Program, each call offering three collaborative research grants. Each grant will provide funding for three years, with the necessity of annual review and approval for continued funding.

Grant applications will be assessed on a strictly competitive basis by an international panel of independent experts. A typical award will provide resources for each individual laboratory adequate to cover human resources costs (at the levels of scholarships or contracts with limited term according to applicable regulations and the public administration rules, for PhD or MD-PhD students, postdoctoral fellows, or technicians in Portugal - and salaries for PIs, students, postdoctoral fellows or technicians at Harvard and affiliated institutions provided by the HMS-Portugal Program), supplies, and limited resources for equipment. These grants will also provide the opportunity for Harvard College undergraduates to participate in research in one of the Portuguese laboratories supported by a collaborative research grant (see Technical Annex). Travel support will

be provided by the HMS-Portugal Program to allow all the researchers from the Harvard teams to meet annually with their counterparts in Portugal and to participate in the Annual Retreat to be held in Portugal; these meetings and the Annual Retreat will be essential to ensure active networking among all the participants of the program.

As a condition of accepting their research grant awards, the Portuguese laboratories involved in the Collaborative Research Grants will make available laboratory slots to accommodate either MD students or MDs in residency training. MDs enrolled in a research project in these laboratories can participate in a significant period of practical training at the Harvard laboratories involved in the Collaborative Research Grants. While in residence at Harvard, Portuguese MDs will become full members of the host laboratory, participating in laboratory research, group meetings, journal clubs, retreats, workshops, seminars, and nanocourses. The Portuguese MDs will also participate in the Harvard Catalyst Colloquium Series and a bimonthly faculty dinner series together with “peer mentors” from one of the Harvard laboratories involved in the Collaborative Research Grants. These paracurricular activities will allow the Portuguese MDs studying at Harvard to interact with Harvard students and fellows and will encourage community-building among the Portuguese MDs in each cohort.

Investigators applying for a clinical and translational collaborative research grant must organize themselves as an international research team. The team must consist of at least three investigators: one investigator is designated as the “Principal Applicant” and the other investigators as “Co-Applicants.” The Principal Applicant and at least one Co-Applicant will be located in Portugal, and at least one Co-Applicant will be located at Harvard. The Principal Applicant will be responsible for coordinating the research on behalf of the team. He/she will also act as the team’s liaison with the HMS-Portugal Program and will be required to submit annual budgets and progress reports.

A key requisite for acceptance of a Collaborative Research Grant is that all funded researchers directly supported by the Research Grant (including the Principal Investigators, students, post-doctoral fellows, and technicians) must attend and participate in the Annual HMS-Portugal Program Retreats and Symposia to be held in Portugal. Failure to attend could result in loss of funding.

Duration of activity. Each grant will provide funding up to three years, with the necessity of annual review and approval by the Review Committee for continued funding. Based on the recommendations of the Review Committee, the HMS-Portugal Program will inform FCT on the

evaluation results.

Funding. The maximal funding for a project is 600,000€ for each Project and, provided by the Program, U.S. \$80,000/year in direct costs for all the Harvard laboratory(ies) participating in a given project. For the 2012 call, funding is available for 3 projects. Funds awarded to Harvard Medical School for the HMS-Portugal Program will cover the participation of HMS teams in each project.

Eligible applicants. Applications must come from groups associated with Portuguese Universities, Associate Laboratories, Research Centers, State Laboratories or any other public or private research institutions, including hospitals (in accordance with article 2 of the Regulations governing access to funding for scientific research and technological development projects). Applications must involve participants from at least two different Portuguese institutions and (at least) one research team from Harvard Medical School, institutions affiliated with Harvard Medical School and/or other Harvard faculties and schools.

Principal Investigators or team members with an overall allocation of over 100% in FCT financed or co-financed projects cannot be eligible for participation. The minimal time allocation for the PI in Portugal is 35% and for each Portuguese team member 15%. Time allocations will be verified before contract signature.

Where to apply. Applications must be submitted online through the FCT website.

Structure of the application. The application must comply with the online FCT application form (see Guide to writing and submitting proposals available through the FCT website - <http://www.fct.pt/apoios/projectos/concursos/docs/guiaoEN> and <http://www.fct.pt/apoios/cooptrans/parcerias/harvard/>).

In annex to the proposal, applicants must create a complete application **in pdf format, written in English**, which includes:

- An overview of proposed research emphasizing how the proposal meets the aims of the HMS-Portugal Program. Emphasize also the nature and expected outcomes of the

collaborative work. State clearly the aims of the team as a whole and indicate the specific role played by each member in achieving the goals of the team. Explain the advantages of conducting the proposed studies as a collaborative effort. (do not exceed three pages, Arial regular font, 11 point)

- A detailed outline of the proposed research, including preliminary results and approach (do not exceed seven pages; Arial regular font, 11 point). The detailed presentation must delineate the specific contributions of each member of the team.
- The CV and publication list of the principal applicant and each co-applicant (for each applicant, maximum of 2 pages, Arial regular font, 11 point, including a list of up to 10 of the most relevant papers)
- Applications must be written in English, must be single-spaced, have left and right margins of 2.5 cm.

Review of applications. Applications will be reviewed by a Review Committee of independent experts, from the United States and nations other than Portugal, organized by FCT in close collaboration with Harvard Medical School. The Review Committee will be chaired by Professor Lee Nadler at Harvard Medical School and will be responsible for evaluating the merit of each proposal, and for identifying ways in which successful applicants might work together to avoid the creation of redundant content.

Notification. All applicants will be notified in accordance with article 11 of the Regulations governing access to funding for scientific research and technological development projects.

Progress Report. A yearly report will be delivered by the awardees, to FCT and to the Review Committee for interim review by the Review Committee, with the necessity of approval for continued funding.

Final Report. A final Report will be delivered by the grantees to FCT and to the Review Committee for review.

2: Junior Research and Career Development Awards

The Junior Research and Career Development Awards will provide MDs in Portuguese residency training with an opportunity to apply on a competitive basis for funding to support their clinical research in Portugal. Awards will be made to MD residents who propose a worthwhile project, demonstrate the support of their institution to pursue the work full-time over a two- to three-year period, and bring to the project a Portuguese mentor. Where appropriate, a Harvard co-mentor may also be recruited.

Each award will support human resources costs (scholarships or contract with a limited term) for the MD applicant as well as research costs over the two to three year period. Tuition and registration will be provided by the HMS-Portugal Program for each qualified MD resident to attend the Harvard Medical School “Program in Clinical Effectiveness (PCE)” summer course (see <http://www.hsph.harvard.edu/clineff/>) during the first and second years of their award. The awardees must apply and be accepted to the PCE summer course through the normal PCE admissions process. Participation in the Program in Clinical Effectiveness for two successive summers will provide each awardee with a solid underpinning for clinical research.

An important condition of the award will be an institutional guarantee of the support and infrastructure required to carry out the work. This support and infrastructure must be guaranteed in writing by the Portuguese hospital, clinical institution, and/or research laboratory in which the clinical research will be conducted.

Duration of activity.

Each grant will provide funding up to three years, with the necessity of annual review and approval by the Review Committee for continued funding. Based on the recommendations of the Review Committee, the HMS-Portugal Program will inform FCT on the evaluation results.

Funding. Up to 240,000 Euro will be available to support each applicant who is chosen (including human resources – scholarships or contracts with a limited term, travel and support for research in Portugal). For the 2012 call, funding is available for 2 awards.

Where to apply. Applications must be submitted online through the FCT website.

Structure of the application. The application must comply with the online FCT application form (see Guide to writing and submitting proposals available through the FCT website -

<http://www.fct.pt/apoios/projectos/concursos/docs/guiaio> and

<http://www.fct.pt/apoios/cooptrans/parcerias/harvard/>).

In annex to the proposal, applicants must create a complete application **in pdf format, written in English**, which includes:

- Three detailed letters of recommendation sent by individuals who are familiar with the applicant's clinical ability and/or research potential. One of these letters must be from the applicant's Department or Division Head who must take responsibility for protected time of the applicant from clinical effort.
- A one-page statement of the applicant's reasons for wishing to attend this program, indicating his/her professional goals and describing why he/she feels that this program will be beneficial to him/her.
- The CV of the applicant.

Review of applications. Applications will be assessed by a Review Committee of independent experts, to be organized by FCT in close collaboration with Harvard Medical School. The top four applications will be sent to the Clinical Effectiveness Program Admissions Committee.

Notification. The applicants will be notified in accordance with article 11 of the Regulations governing access to funding for scientific research and technological development projects.

Start of activity. Program starts July 1, 2013.

Progress Report. The selected candidates will participate in Harvard's Program in Clinical Effectiveness during the summer of 2013. The directors of the HMS-Portugal Program will identify Harvard-based clinical research mentors to work with each of the Portuguese MDs during their time in Boston. The Portuguese MDs will work with these mentors to develop their ideas into a research

project. Upon returning to Portugal, the candidates will be asked to submit their fully developed research proposal for review (deadline October 15, 2013), to assess whether it now has both merit as well as likelihood of success. If this research proposal is approved by the directors of the HMS-Portugal Program, then they would be granted further funding. A yearly report will be delivered by the awardees, to FCT and to the Review Committee for interim review, with the necessity of approval by for continued funding.

Final Report. A final Report will be delivered by the awardees, to FCT and to the Review Committee for review.

3: Senior Research and Career Development Awards

The Senior Research and Career Development Awards will support physician investigators who qualify for admission to an established Master's training program at Harvard Medical School. Upon completion of their training, the trainees will return to Portugal with a full and thorough understanding of clinical research and an active and ongoing clinical research project that will be continued and expanded in Portugal with the help of a two-year research and career development grant including human resources costs (scholarships or contract with a limited term) and research costs in Portugal, as described in the budget presented by the candidate and approved by the Program. An important condition of the award will be an institutional guarantee of the support and infrastructure required to carry out the work. This support and infrastructure must be guaranteed in writing by the Portuguese hospital, clinical institution, and/or research laboratory in which the clinical research will be conducted.

Each Senior Research and Career Development Award will include funding, provided by the HMS-Portugal Program, for the two-year Harvard Scholars in Clinical Science Program (SCSP; see <http://www.hms.harvard.edu/gradprograms/scsp/>). This two-year post-graduate training program in clinical investigation includes formal course work, a longitudinal seminar series, and a mentored clinical research project. Students who successfully complete the program are awarded a Master of Medical Sciences degree from Harvard Medical School.

The application process for the Senior Research and Career Development Award will be designed to recruit the most competitive Portuguese post-graduate student for intensive training in clinical research at Harvard Medical School. The Admissions Committee will include representatives from the Faculties of Medicine and teaching hospitals throughout Portugal as well as one advisor from

the Harvard Scholars in Clinical Science Program. Applicants will be ranked on the basis of their grades, test scores, research experience, letters of recommendation, and interest and aptitude for international-caliber careers in clinical investigation. The best student will be chosen for this program, without regard for gender, country of origin, city of origin, specific field(s) of interest within clinical investigation, or initial preference for returning institution (see above). The program will forward the application of two students per year to the Harvard Medical School Scholars in Clinical Science Program Admissions Committee; if the top Portuguese applicant is accepted through the SCSP's normal application and admissions process, the program will award the student two years of funding to attend the SCSP and an additional two years of funding as a new clinical investigator in Portugal. Continued funding will be contingent on satisfactory progress.

Duration of activity. Funding will be awarded for up to 4 years. Continued funding will be conditional on the progress achieved by the awardees as determined upon review by the Review Committee.

Funding. Up to 400,000 Euro will be available to support each application that is chosen (including human resources – scholarships or contracts with limited term, travel and support for research in Portugal). For the 2012 call, funding is available for 1 award.

Where to apply. Applications must be submitted online through the FCT website.

Structure of the application. The application must comply with the online FCT application form (see Guide to writing and submitting proposals available through the FCT website -

<http://www.fct.pt/apoios/projectos/concursos/docs/guiaio> and <http://www.fct.pt/apoios/cooptrans/parcerias/harvard/>).

In annex to the proposal, applicants must create a complete application **in pdf format, written in English**, that includes:

- Three detailed letters of recommendation sent by individuals who are familiar with the applicant's clinical ability and/or research potential. One of these letters must be from the

applicant's Department or Division Head who must take responsibility for protected time of the applicant from clinical effort.

- A statement of intent that A) Describes the general area of research in which the applicant is interested and his/her reasons for choosing this area (maximum of 300 words). B) Provides a general outline of the project(s) that the applicant wishes to complete during the tenure of his/her involvement in the Scholars in Clinical Science Program. Please provide as much detail as possible including hypothesis, methods and potential pitfalls. If the applicant does not have a specific project, describe in general what the project(s) might be (maximum of 700 words). C) If the applicant has already chosen a mentor, what were the reasons for doing so? (maximum of 200 words). D) Describes the applicant's reasons for wishing to attend this program, indicating his/her professional goals and describing why he/she feels that this program will be beneficial to him/her (maximum of 600 words).
- The CV of the applicant.

Review of applications. Applications will be assessed by a Review Committee of independent experts, to be organized by FCT in close collaboration with Harvard Medical School. The top two applications will be sent to the Scholars in Clinical Science Program Admissions Committee.

Notification. The applicants will be notified in accordance with article 11 of the Regulations governing access to funding for scientific research and technological development projects.

Start of activity. Program starts July 1, 2013.

Progress Report. A yearly report will be delivered by the awardee, to FCT and to the Review Committee for interim review, with the necessity of approval by for continued funding.

Final Report. A final Report will be delivered by the awardee, to FCT and to the Review Committee for review.