

1. INTRODUCTION

Biomedical research conducted by young researchers is a two-step Call for proposals of the Scientific Research Area having March 12th, 2019 and September 10th, 2019 as deadlines for the submission of LOIs and Full Proposals, respectively.

2. BACKGROUND

A distinctive feature of the Italian research system is the lack of support towards young researchers and the absence of training frameworks to successfully elicit their independency and leadership abilities.

In this framework, the well-known “brain drain” phenomenon becomes almost inevitable. Furthermore, young talents trained abroad seldom if ever decide to move back to Italy. The Italian system is thus losing an entire generation of talents. For young researcher to staying in Italy means to face a country with limited financial resources, an inefficient turnover, and a failing meritocracy system. Therefore, it has become by now a priority for our country to change the status quo and recreate the conditions for young talents to contribute science and innovation with original and independent initiatives.

In order to encourage the creativity of young researchers, through a “bottom-up” approach, this Call for proposals – within the biomedical research field - aims to clarify the molecular mechanisms underlying human diseases.

3. AIMS

This Call is meant to support research projects aimed to identify and understand the molecular basis of a human disease. Applicants are required to carefully specify the disease and the molecular mechanism they intend to investigate. All human diseases are eligible for this Call, except for amyotrophic lateral sclerosis¹.

The originality of the research project, its methodological approach and the expected outcomes will be crucial during the entire selection process. Specifically, applications should be supported by a clear rationale, conceived on compelling preliminary data.

Through this Call, Cariplo Foundation aims to offer young researchers the opportunity to develop independent careers, conducting research projects under their own responsibility, without the control of a supervisor. It is thus recommended to the applications to clearly stress the leadership of the young Principal Investigator (PI), without ambiguities on his/her effective role in conducting the proposed project.

Finally, embracing the principles of Responsible Research and Innovation², Fondazione Cariplo aims to promote initiatives fostering communication and interaction between researchers and the civil society. In particular, researchers must propose a communication plan inclusive and open to all stakeholders differently implicated in the research. Planned activities are meant to facilitate the activation of a dual exchange between science and society. The communication plan is considered an integral part of the research proposal.

4. GUIDELINES

¹ Funding opportunities for projects focusing on this pathology are provided by ARISLA Foundation - www.arisla.org - Cariplo Foundation has contributed, among others, to found ARISLA Foundation.).

² The European movement on the theme of Responsible Research and Innovation (RRI) is constantly evolving, as emerges from the debate which has recently led to the so called “Rome declaration on RRI” (https://ec.europa.eu/research/swafs/pdf/rome_declaration_RRI_final_21_November.pdf). Considering the available literature, it is possible to describe RRI as a dynamic and iterative process which intends to match research and innovation to values, needs and expectations of the society. Moreover, RRI aims at actively involving all the stakeholders taking part to activities of research and innovation, making them mutually responsible with respect to both the research process and its results.

Before participating to this Call, applicants are required to carefully read the following documents, that can be found on the Foundation website:

- Grant management and reporting guide;
- Guidelines for presentation;
- Communication guidelines;
- Acknowledgement guidelines for academic papers;
- Intellectual property rights policy;
- Open access policy.

By participating to this Call, organizations acknowledge, agree and accept that the award of the grant requires the irrevocable acceptance of all the policies and the respect of guide and guidelines mentioned above.

4.1 ELIGIBLE SUBJECTS

It is mandatory for the leading host institution, and more specifically the operational headquarters of the project, to be located within the geographical area of interest of Cariplo Foundation (Lombardia plus Novara and Verbania districts). This requirement does not pertain potential partners.

Host institutions must provide PIs with appropriate workspaces, laboratories, equipment, qualified staff (e.g. lab technicians), as well as any other resources needed to adequately carry out the project.

By participating to this Call, organizations accept the "portability of the grant". Any change in the host institution depends on Fondazione Cariplo approval according to the guidelines of this Call.

4.2 ELIGIBLE PROJECTS

Project's PI of the leading unit must:

- fulfil all the following requirements:
 - i) has been awarded of his/her (first) PhD at least 2 and no later than 7 years by the deadline of this Call^{3,4};
 - ii) has not reached yet their 41st birthday on the deadline of this Call⁵;
 - iii) has at least one publication as first or last author in a peer-reviewed journal;
 - iv) has an h-index⁶ ≥ 6 or at least one publication as first/last author in a peer-reviewed journal with an Impact Factor⁷ ≥ 10 or at least two publications as first/last author in a peer-reviewed journal with an impact factor ≥ 5 .
- guarantee at least 50% of his/her total working time to the project;
- be the corresponding author in all the publications strictly related to this project and the last author in at least one of these.

Moreover, the PIs of all the involved units (leading and partner) must:

³ The call is also addressed to medical doctor awarded of their medical specialty (MD) at least 2 and no later than 7 years by the deadline of this call. For candidates with both PhD and MD, eligibility will be determined considering the degree they earned first.

⁴ Extension of eligibility:

- Maternity: 18 months for each child (born before or after the PhD/MD award);
- Paternity: effective period of paternity leave for each child (born before or after the PhD/MD award);
- Illness (over 90 days): effective period taken for each incident (occurred after the PhD/MD award).

⁵ See footnote 3.

⁶ Source: <https://www.scopus.com/freelookup/form/author.uri>

⁷ Impact Factor should be referred to the year of publication. For recently published papers, in case of unavailability of the Impact Factor, please provide the most recent value.

- be involved as PI (leading or partner unit) in only one project of the Scientific Research Area (except for Calls in partnership with other granting agencies)⁸;
- not be the PI (leading or partner unit) of any other ongoing project previously funded by the Scientific Research Area (except for Calls in partnership with other granting agencies)⁹.

The total cost of the project should correspond to the requested amount. The requested amount is comprehensive of the additional costs¹⁰, related to the realization of the proposal, and the overhead, according to the eligibility criteria and the thresholds listed below:

- A03 - "Equipment and software"
This entry cannot exceed 20% of the additional costs. It fully covers the costs for newly acquired equipments and softwares. It is mandatory to clearly motivate these costs in accordance to the specificity of the project. In this category can also be included renting costs as well as building work expenses for the installation of the new equipments.
- A04 - "Other amortizable costs"
This entry can only include patent costs.
- A06 - "Temporary staff"
This entry can only include research personnel costs. The cost of administrative staff is not allowed.
- A07 - "Sub-contractors and consultants"
This entry should also include audit¹¹ costs, where applicable¹².
- A08 - "Materials and supplies"
This entry cannot include costs related to office supplies and photocopies.
- A09 - "Overheads"
This entry cannot exceed 10% of the additional costs.
- A10 - "Travel, publication and dissemination costs"
This entry cannot exceed 10% of the additional costs and can only include travel expenses and conference participation fees for the research personnel involved in the project, scientific publications and activities of communication with the civil society.

The grant will cover 100% of project costs. Requested funding should range from 100,000 to 250,000 euros.

Projects should provide the approval of the Ethical Committee¹³. In case submitted proposals require animal experimentation, Fondazione Cariplo should be informed about the Ministry of Health authorization before the final grant report.

4.3 NON-ELIGIBLE PROJECTS

Any proposal with the following characteristics will be considered non-eligible:

- failing to meet this Call scientific priorities;
- purely descriptive;
- essentially aimed to develop novel methodologies and/or technologies;
- having exclusively a pharmacological and/or clinical focus;
- aimed to set up new research centres and/or laboratories and/or animal facilities;

⁸ In case of multiple submissions as PI (leading or partner unit), only the first one received will be considered.

⁹ A project is considered ongoing unless the final grant reports – both the scientific and the financial one - have been uploaded on our website before the deadline of this call.

¹⁰ Sum of: A03, A04, A06, A07, A08, A10.

¹¹ Exclusively certificated auditors are considered eligible.

¹² For the sole purpose of ascertaining whether the obligation to perform a financial audit applies or not, the amount which has to be considered is obtained by multiplying the eligible costs detailed in the Budget (sum of entries A06, A07, A08, A09 and A10) by the coefficient 1,25.

It is also recommended to refer to the "Grant management and reporting guide" and to the "Guidelines for audit"; both documents are available on the "Grant management and reporting" page of Cariplo Foundation's website.

¹³ In case the approval is not available by the Call's deadline, the leading organization will be requested to send it together with the preliminary fulfillment.

- missing a proper communication plan (for detail please see the “Communication Guidelines”).

In addition, Fondazione Cariplo will not consider eligible a project that has been submitted more than two times to previous editions of this Call.

4.4 SUBMISSION PROCESS

PHASE 1 - Letter of intent (LOI) submission: this first step concerns with the formal requirements and the selection of those proposals best responding to the scientific purposes of the Call.

LOI must be submitted by 5:00 p.m. on March 12th 2019. PIs must submit LOI accessing the online platform available on Fondazione Cariplo’s website. First-time applicants need to register and require their username and password.

In order to apply for this grant, applicants are required to fill in integrally all the online forms. Furthermore, applicants must upload all the following documents:

- LOI (PDF file)¹⁴;
- Host institution agreement for both the leading and partner units;
- Partnership agreement¹⁵;
- Documentation of the applicant organizations¹⁶;
- Publication(s) having the PI as first or last author, as PDF files;
- PhD/MD degree certificate

In any case, application submitted using forms other than the specific ones provided by the Foundation will not be considered.

Please note that in this first phase of evaluation the LOI represents the only document subjected to meritocratic analysis by independent reviewers

Once phase 1 is accomplished, the list of proposals admitted to phase 2 will be published on the Foundation website.

PHASE 2 – Full proposal submission: this second step concerns with the meritocratic analysis for those PIs invited to submit full proposals.

Full proposals must be submitted by 5:00 p.m. on September 10th 2019. PIs must submit full proposals according to the instructions they will receive.

Once phase 2 is accomplished, the list of funded proposals will be published on the Foundation website.

4.5 CRITERIA

All proposals submitted before the deadlines and according to the formal requirements described above will follow a two-step evaluation process:

I. *LOI evaluation*

Fondazione Cariplo will check that all proposals are submitted correctly. This means that the eligibility of the applicants as well as the presence of all necessary documents and the coherence with the guidelines will be checked. In parallel, a panel of external and independent reviewers will check the scientific coherence in accordance to the Call indications. During this step, each proposal will be analysed by 2 independent reviewers selected according to their expertise in the specific research area of the

¹⁴ The LOI form can be downloaded from the website.

¹⁵ In case the project involves partners.

¹⁶ Applicants are advised to read the document ‘Guidelines for presentation’ available on Fondazione Cariplo’s website.

project. Please note that the keywords provided by applicants will be determinant in the definition of the match between reviewers and projects. This logic is meant to ensure the identification of the most suitable reviewers for the projects. Only the most competitive applications will access the last step of the evaluation process. All PIs will receive a feedback with the reviewers' evaluations.

II. *Full proposal evaluation*

Full proposals will be evaluated by independent experts in a peer-review process ensuring scientific expertise and impartiality. Each proposal will be analysed by 3 independent reviewers selected for their expertise in the specific research area of the project, following the matching criteria mentioned above. The final score given to the project reflects scores and weight described below, according to the reviewers' evaluations. In parallel, Cariplo Foundation will evaluate the coherence of the budget and the quality of the dissemination plan.

1. DESCRIPTION (weight 5%)

- clarity of the project aims and strategies
- state of the art analysis
- preliminary data significance

2. APPROACH (weight 20%)

- adequacy and rationality of the experimental plan
- risk evaluation and presence of adequate back-up plans

3. INNOVATION (weight 15%)

- originality and innovation of the project

4. OUTCOMES (weight 20%)

- expected results and their impact on the scientific community
- potential benefits for human health

5. PRINCIPAL INVESTIGATOR, TEAM AND ORGANIZATION (weight 25%)

- scientific and managerial leadership of the PI
- track record and adequacy of the PI and team competencies (leading organization and partner)
- expected impact of the project in terms of the PI's professional development

6. DISSEMINATION (weight 5%)

- quality of the communication plan

7. BUDGET and PROJECT DURATION (weight: 10%)

- budget suitability and coherence and duration of the project

The final ranking ultimately represents the list of the best projects worth of funding.

At the end of the review process, all applicants will receive official communication together with reviewers' feedback.

5. AVAILABLE BUDGET

The budget available for this Call for proposals consists of 4 million euros.

6. OTHER USEFUL INFORMATIONS

The Foundation, as a private entity, is not required to comply with public procedures and has the faculty not to allocate the entire budget in whole or in part.

The Call for Proposals and all the mentioned documents can be found on the Foundation website www.fondazionecriplo.it.