Biomedical research on ageing-related diseases
Call for proposals
Deadline: April 15th, 2015

BACKGROUND

Estimates about the trends of EU population over the next 50 years indicate a slight increase in terms of number of individuals, but an important shift towards older ages. It is expected that, by 2060, 30% of the Europeans will be over 65 years old\(^1\). This context of demographical change is associated with a transition in the epidemiological landscape. Population ageing goes hand in hand with an increase in the prevalence of chronic degenerative diseases, including diabetes, cancer, musculoskeletal disorders and neurodegenerative, cardiovascular and chronic obstructive pulmonary diseases. Because of their long term nature, these diseases go beyond the topic of physical health and impact on the overall quality of life of the individual and the society. Also, they represent a heterogeneous group of pathologies which are often associated with other disorders or occur as side-effects of treatments for other diseases. Due to these reasons, chronic degenerative diseases deserve a specific consideration within biomedical research.

AIMS

In line with its strategic orientations, Cariplo Foundation has decided to address the issue of well-being of the elderly. After a first edition dedicated to neurodegenerative and cardiovascular diseases\(^2\), in 2015 the call for proposals focuses on immunological disorders, infective diseases and metabolic disorders in the aged population.

The connections between metabolism and immune system are becoming increasingly evident in the scientific literature, leading to the introduction of the term “immunometabolism”\(^3\) to indicate this new field of investigation. It is nowadays well known that obesity has an impact on the immune system and induces a state of chronic inflammation, which is in turn associated with metabolic imbalances. The increased risk on infections in the diabetic patient is also an established fact. These examples suggest that the mechanisms underlying metabolic and immunological disorders display cross-influences at multiple levels.

With the present call for proposals the Foundation intends to stimulate research in this field, with the ultimate goal of identifying new targets which could be useful in the treatment of pathologies affecting elderly people, which represent a particularly vulnerable population group.

Applicants are requested to select one or more pathologies among the immunological, infective and metabolic ones, motivate the relevance to the aged population and specify the mechanism they intend to investigate in the proposed research project.

The originality of the research project, its methodological approach, and the expected translational outcomes in the medium term will be key elements in the selection process.

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\(^1\)The 2012 Ageing Report, Economic and budgetary projections for the 27 EU Member States (2010-2060), European Commission, 2012.
\(^2\)Call for proposals “Biomedical research on ageing-related diseases 2014”.
\(^3\)D. Mathis e S.E. Shoelson, Immunometabolism: an emerging frontier, Nature Reviews Immunology 11, 81-83 (February 2011).
Specifically, applications should be supported by a clear rationale, conceived on the basis of compelling preliminary data. In addition, the proposed experimental plan is required to employ a multidisciplinary approach that effectively orchestrates the different operating units of the various hosting institutions participating in the project. The description of the working team should clearly specify which is the added value brought by each partner as well as how it is integrated in a coherent experimental design.

The Foundation will support experimental laboratory research based on sound clinical data, where appropriate, in order to achieve a tangible valorisation of the knowledge arisen from the research project through improvements in prevention, diagnosis and treatment practices.

In addition, it is required that projects represent an opportunity of training and professional development for the young researchers which are part of the working teams.

Also, the Foundation aims at promoting initiatives which envision the accomplishment of activities of communication and interaction with the civil society, fostering Responsible Research and Innovation⁴.

GUIDELINES

Eligible applicants

Beyond the general requirements set out in the “Guidelines for presentation”, this call for proposals is addressed to institutions which directly carry out scientific research in the specified field of interest and have adequate staff and equipment for its realization.

Moreover, it is mandatory that the lead hosting institution, and more specifically the operational headquarters of the project, be located within the geographical area of interest of Cariplo Foundation (Lombardia plus Novara and Verbania districts). This requirement does not pertain to partners.

Principal investigators (PIs), both in the lead and in the partner organizations, must be senior researchers with a solid track record in the field of biomedical research. It is also required that PIs actively perform their research at their hosting institution and ensure their participation in the project, with an appropriate commitment to its realization.

Also, the Foundation shall not accept applications by PIs (both leader PIs and partner PIs) of projects funded by the Scientific Research Area of the Foundation in the context of past calls and still ongoing. A project is considered ongoing unless the final grant reports – both the scientific and the economic one - have been uploaded on the dedicated area of the Foundation website within the deadline of the present call.

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⁴ 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” (http://www.sisrri-conference.eu/wp-content/uploads/2014/12/RomeDeclaration_Final.pdf). In light of 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.
Eligible projects

The Foundation will select a limited number of projects. To be eligible, proposals must:

• be submitted by a partnership made up of at least two different eligible institutions. One of them needs to act as the lead organization;
• guarantee that each PI (leader and partner) will dedicate to the proposed research project at least 30% of his/her total working time;
• study a disease of the elderly, belonging to one of the classes indicated in the section “Aims” of the call;
• focus on a molecular mechanism which is at the basis of the selected disease;
• involve, train and care for the valorisation of young researchers;
• prepare a plan of communication activities with the civil society, coordinated by a young researcher. The plan should include the use of multimedia tools (website, social networks) as well as, possibly, other channels (activities in schools, meetings with the public, conferences, press releases, publications, etc.).

Moreover, any proposal with the following characteristics will be considered ineligible:

• purely descriptive projects;
• studies essentially aimed at developing novel methodologies and/or technologies;
• projects having an exclusive pharmacological and/or clinical focus;
• funding requests aimed at setting up new research centres and/or laboratories and/or animal facilities.

The total cost of the project can only include costs related to the realization of the proposed studies, respecting the eligibility criteria and the thresholds listed below:

• A03 - “Equipment and software”
  This entry cannot exceed 20% of the additional costs and can exclusively include newly acquired equipment and software, limited to the percentage of use which can be ascribed to the project.
• 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 audit costs, where applicable.
• A08 - “Materials and supplies”
  This entry cannot include costs related to stationery and photocopies.
• A09 - “Overheads”
  This entry cannot exceed 5% of the additional costs.
• A10 - “Travel, publication and dissemination costs”

5The term “young researcher” in this call for proposals indicates graduate fellows, PhD students and post-docs not older than 35 years of age.
6Sum of: A03, A04, A06, A07, A08, A10.
7With the sole aim of ascertaining whether the obligation to perform a financial audit applies or not, the amount which has to be considered is obtained multiplying the eligible costs detailed in the Budget (sum of entries A06, A07, A08, A09 and A10) by the coefficient 1.25 (which represents an estimate of the co-funding generally guaranteed by the hosting institution, mainly in the form of permanent staff). It is also recommended to refer to chapter 10 of 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.
8See footnote 6.
This entry cannot exceed 15% 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 350,000 euros.

When filling in the forms, note that the total cost of the project will have to coincide with the requested funding.

Evaluation criteria

Projects will be evaluated through a peer review process relying on external, independent and internationally renowned reviewers, in order to guarantee transparency and objectivity. At the end of the evaluation process, a feedback containing the reviewers’ comments will be transmitted to each applicant.

Besides the overall scientific quality of the proposal, the evaluation will take into account the following elements:
- the level of analysis of the state of the art;
- the robustness of preliminary data;
- the clarity of the project aims and strategies;
- the expected results and their impact on the scientific community;
- the potential benefits for the health of the elderly;
- the originality and innovation of the project;
- the adoption of a multidisciplinary experimental plan;
- the scientific leadership of the PIs;
- the track record of the PIs and the research team;
- the engagement of young researchers, also in positions of responsibility, and the presence of plans for their training and professional development;
- the efficacy of the communication plan, fostering Responsible Research and Innovation;
- the consolidation of collaborations with national or international research centres and/or the ability to build new partnerships;
- the nature and strength of the partnership and the value added by each partner to the implementation of the project;
- the adequacy of budget and duration of the project.

AVAILABLE BUDGET

The budget available for this call for proposals consists of 5 million euros.

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Before submitting a proposal, applicants are kindly invited to carefully read the documents listed below, available on Cariplo Foundation’s website at www.fondazionecariplo.it:
- Guidelines for presentation;

9See footnote 6.
10See footnote 5.
11See footnote 4.
• **Grant management and reporting guide**;
• **Intellectual property rights policy**;
• **Open access policy**.

By submitting a proposal, applicants acknowledge, agree and accept that the award of the grant requires the irrevocable acceptance of the aforementioned policies.

In order to apply for a grant under this call for proposals, it is strongly recommended to:
- **carefully fill in all the online forms**, which specifically include:
  - registry of the leading hosting institution (new applicants should fill in the form *ex novo*, while organizations which have already registered should check and update, when necessary, their details);
  - project section (in Italian);
  - complementary data (in English);
  - budget section.

- **upload all the requested documents** according to the *Guidelines for presentation*:
  - detailed project\(^{12}\);
  - detailed budget\(^{13}\);
  - letter of support from the legal representative of the hosting institutions (both lead organization and partners);
  - partnership agreement;
  - documentation of the hosting institutions.

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\(^{12}\)The detailed project has to be compiled on the basis of the form available for this call for proposals, which can be downloaded from the online section “Complementary Data”.

\(^{13}\)The detailed budget has to be compiled on the basis of the form available for this call for proposals, which can be downloaded from the online section “Complementary Data”.