According to the Telethon mission, this call is in support of research projects focusing on diseases of proven genetic origin, either monogenic or polygenic forms.

For multifactorial diseases, the following applies:

- Studies focused on monogenic or polygenic forms of multifactorial diseases are ELIGIBLE
- Studies focused on the identification of genetic risk factors (e.g. SNPs or other predisposing variants) for multifactorial diseases are NOT ELIGIBLE.

The FT GENERAL GRANT project duration can range from 1 to 3 years.

The call also includes the following funding opportunities:

- The TELETHON CAREER AWARD in support of young researchers proposing – as Lead Applicant – innovative projects in the field of rare genetic diseases and with the need of a salary coverage. This award is open to researchers with a minimum of 2 and a maximum of 7 years’ experience since completion of the PhD (or specialization for medical degree). FT will provide salary coverage for the entire duration of the project, which is fixed for 3 years.

- The FONDAZIONE PISANA PER LA SCIENZA/FONDAZIONE TELETHON (FPS/FT) award aimed at attracting researchers willing to join the scientific community of the Fondazione Pisana and proposing innovative projects exclusively in the field of neurological and/or cardiovascular rare genetic diseases (http://www.fpsscience.it/en/research-activities/5/).
  This award is open to researchers of all levels of seniority demonstrating the ability to formulate and conduct an independent research line in synergy with the scientific activities of FPS. FPS will provide salary coverage for the principal investigator for the entire duration of the project, which is fixed for 3 years.

APPLICATION’S SECTIONS

The Full Application includes information directly embedded from the initial Letter of Intent (LOI); further information of the Letter of Intent can be found in the LOI section at end of the Application.

FULL EVALUATION INSTRUCTIONS

REVIEWERS’ ROLE - Each application is reviewed and scored by three Committee members (hereon “Reviewers”). The primary reviewer is responsible for the project’s presentation during the plenary review session. Primary and secondary reviewers have to provide written comments, whereas tertiary one is not requested to (but may provide written comments, if he/she wants to).
EVALUATION – The Reviewers are requested to fill in the “Full Application Evaluation Form” available in TETRA - Telethon Projects Managements system portal at https://projects.telethon.it accessible through personal login and password.

In support of their evaluation, Reviewers will be provided with written comments by External Reviewers, who are chosen ad hoc for each Application by Telethon Research Program Managers or suggested by Panel members to advice on specific topics of the Application.

Written Comments

Written comments are an essential part of the review and are critical in developing review reports for the Applicants.

The individual written comment will be anonymously incorporated into a complete review report that will be fed back to the Applicant. It is therefore important that the written material is accurate, clearly written, and does not include derogatory language.

Please note: External Reviewers’ written comments will also be included as such in the review report.

Description (max 2,000 characters including spaces)

Primary reviewers only are requested to fill in the description field. This should summarise the objectives of the study and the hypothesis to be tested, it also concisely describes the specific aims and procedures of the proposed research.

SCIENTIFIC COMMENTS

This section should present a comprehensive evaluation of the application.

For revised applications only, the Reviewers will provide their evaluation of the changes and responses to the critiques from the previous review, with the indication of whether the Application has been improved comparing to the previous submission. The Telethon Review Report of the previously submitted application together with the Applicant’s rebuttal are available within the Application (Cover Letter section).

- **Scientific Merit** (max 12,000 characters including spaces): the Reviewers are asked to evaluate the overall scientific merit of the proposal by providing an analysis of the strengths and weaknesses on the basis of the following parameters:
  - *Link to genetic diseases*: is the proposal addressing a genetic disease? Does the proposal bear the potential to advance knowledge on the disease(s) of interest?
  - *Originality of science*: Does the project employ novel concepts, approaches or methods? Are the aims original and innovative? Does the project challenge existing paradigms or develop new methodologies or technologies?
  - *Preliminary results*: Are proof-of-principle experiments provided adequately supporting new principles to be tested in the grant? Are novel tools or reagents well characterized?
  - * Appropriateness of design and methods*: Are the conceptual framework, design, methods, and analyses adequately developed, well integrated, and appropriate to the aims of the project?
  - *Feasibility, Pitfalls and Alternative Approaches*: Does the applicant acknowledge potential problem areas and consider alternative tactics?
  - *Significance and Innovation*: Does this study address an important problem? If the aims of the application are achieved, how will scientific knowledge be advanced? What will the effect of these studies be on the concepts or methods that drive this field?
- **Safety**: Evaluate the adequacy of the proposed protection for humans, animals or the environment, to the extent they may be adversely affected by the project proposed in the application (if any).
- **Previous achievements** (dedicated section for former grantees only): did the previous Telethon grant produce relevant results relative to the stated aims?

- **Impact on patients and relevance to Telethon’s mission** (max 2,000 characters including spaces)
  What is the potential of the proposed project to make progress towards therapy or to provide any other impact on patients’ clinical management and/or quality of life? How close in time is such a development envisaged?

**Comments on Applicant** (max 2,000 characters including spaces)
Is the investigator appropriately trained and well suited to carry out this work? Is the work proposed proportionate to the level of experience of the principal investigator and key personnel? Is the Applicant a significant player in the field of the submitted research project?

Please note that Fondazione Telethon does not apply assessment of Candidate’s CV based on journal-based metrics, such as Journal Impact Factor. Fondazione Telethon signed and endorses the San Francisco Declaration on Research Assessment (DORA, http://www.ascb.org/dora/).

**Key Personnel** - Please note that Italian public bodies, such as universities, are obliged, in compliance with the national legislation in force, to recruit personnel through public competition announcements containing all the selection and appointment criteria. Consequently, in the proposal only the skills/profile needed can be outlined and the names of the personnel to be enrolled will become known only after the public selections procedures have been carried out.

**Comments on Budget Allocation** (max 2,000 characters)

A maximum of 80,000 €/year for research expenses is allowed for all the different funding opportunities.

The Lead Applicant salary coverage request is not allowed except for:

**Career Award**: FT will provide salary coverage for the 3 years project, for an amount of maximum 40,000 €/year.

**Fondazione Pisana per la Scienza/FT award**: FPS will provide salary coverage for the Lead Applicant for the 3 years project. Salary will be established based on the seniority of the researcher, in due time, once the project will be selected for funding.

Reviewers are asked to evaluate the appropriateness of the budget in relation to the proposed research and whether all items are considered realistic and justified. Reasons for each recommended modification in amount or duration of support must be presented. Reviewers are asked to identify any apparent scientific or budgetary overlap with active or pending support.

**Overall evaluation** (max 2,000 characters)
This section is for the Reviewers to summarize the **key reasons** for their overall rating, indicating the relative **strengths**, **weaknesses** and overall **final considerations**.

**Scores**
Each project requires **two scores**:

- **Scientific Merit** (is the proposed research excellent?)
  Relative weight: 90%
  Score range: from **1.0 (poor)** to **5.0 (outstanding)** by 0.1 unit increments.
### Full Evaluation Scoring Scale

<table>
<thead>
<tr>
<th>Score</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.6 - 5.0</td>
<td>Outstanding</td>
<td>No concerns</td>
</tr>
<tr>
<td>4.0 - 4.5</td>
<td>Excellent</td>
<td>No substantial issues need discussion</td>
</tr>
<tr>
<td>3.0 - 3.9</td>
<td>Good</td>
<td>Only one or a few addressable concerns</td>
</tr>
<tr>
<td>2.0 - 2.9</td>
<td>Average</td>
<td>Several concerns in one or more Aims</td>
</tr>
<tr>
<td>1.0 - 1.9</td>
<td>Poor</td>
<td>Major concerns in one or more Aims</td>
</tr>
</tbody>
</table>

- **Impact on patients** (how close to therapeutic development or to any other potential impact on patients are the proposed studies?)

  Relative weight: 10%

  Scores and scoring criteria (on the basis of the proposed research activity):

  **Score=5: Clinical Trials.** Therapeutic clinical trials, palliative clinical trials or clinical trials to validate diagnostic tools, natural history of disease.

  **Score=4: Preclinical Studies; Disease Gene Identification.** Pre-clinical studies testing efficacy/safety of therapeutic strategies (in vitro and/or in animal models); discovery of new disease genes.

  **Score=3: Mechanisms, Structure, Function, Targets, Drug Discovery.** Basic (laboratory) studies on mechanisms; functional/structural omics studies; search for new therapeutic targets.

The **overall score** will be automatically calculated by combining the two scores according to their relative weight.