

CaixaResearch Health
Call for Proposals 2023

Eligibility and evaluation guidelines

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1. Introduction

This guide sets out the procedure for evaluating and selecting proposals in the CaixaResearch Health Call (hereinafter, Proposals and individually Proposal) and contains the guidelines and evaluation criteria to be followed to score a grant proposal.

The “la Caixa” Foundation has established that the following principles should govern all assessment processes for the CaixaResearch Health Call:

- **TRANSPARENCY.** Information about the basic principles that govern the process of evaluating and selecting proposals, and procedures followed for that purpose are available to applicants, evaluators and the general public on the Call for Proposals website. In addition, Project Leaders receive timely information on the status of their Proposal at each stage of the process and, when appropriate, feedback regarding the evaluation of that Proposal.
- **EQUITY.** Proposals are evaluated based only on the merits they have accredited in relation to the evaluation criteria explicitly defined for each stage of the process, with no other factors being taken into consideration. All Proposals are treated equally and according to the same evaluation criteria. All Proposals undergo an assessment process conducted by expert, independent evaluators.
- **EFFICIENCY.** The “la Caixa” Foundation’s grants are characterized by the thoroughness with which the Proposal assessment process is conducted and the rigor in complying with the stipulated procedures. Punctuality in meeting established deadlines, all of which are known to Project Leaders, is of the utmost importance. The system has been designed to allow evaluators sufficient time to perform their scoring with high standards.
- **QUALITY.** The “la Caixa” Foundation’s grants are awarded based solely on the criteria of scientific excellence and quality of the Project, the potential value of the Proposal, its social relevance and impact, and the suitability and research potential of the Project Leader and Team. For this reason, and to ensure that the evaluators perform their duties adequately, they are appointed in accordance with their area of expertise.

The selection of a Proposal comprises a maximum of three phases:

ELIGIBILITY PHASE: The eligibility procedure will consist of the following phases:

- **Format eligibility:** All Applications received will be reviewed to ensure they fulfill the application criteria published in the Rules for Participation of this Call.
- **Content eligibility:** Those Applications that fulfill the format eligibility will be checked to ensure they are ready to undergo the evaluation procedure.

REMOTE PRE-SELECTION: Each eligible Proposal is sent to three or four experts in the research field(s) of the Proposal. After the remote phase, the Proposals that receive the highest scores in each Thematic Area will move on to the next evaluation phase.

SELECTION COMMITTEE EVALUATION: Project Leaders whose Proposals have passed the pre-selection evaluation phase will be invited to a face-to-face interview in front of a Selection Committee composed of eight to twelve experts in the Thematic Area of their Proposal.



2. Eligibility phase

In order to validate the Proposal and facilitate the evaluation process, this edition includes both a format and a content eligibility phase.

Therefore, the evaluators must consider all Proposals submitted to them as formally eligible for examination and scoring, as they have not been dismissed during the previous eligibility phase.

2.1 Format eligibility.

The Grant Project Office checks the suitability of the Proposals submitted by the established deadline and their compliance with the formal requisites of the Call based on the application criteria described in section 5 of the Rules for Participation.

2.2 Content eligibility

In all previous editions, there was a significant number of proposals (around 30%) which, according to our remote phase reviewers, failed to meet the standards of the Call. In order to address this issue, we have introduced a new content eligibility phase based on two components: an algorithm and two experts, thereby guaranteeing expert human intervention.

AI tool:

Based on data from previous editions, this new phase uses an **Artificial Intelligence (AI) tool** that is capable to detect those Proposals with a very low probability of being selected, by analyzing text fields (not including personal data). This new tool combines three AI biomedical research models based on natural language processing: BioBERT, BioELECTRA and BioBERT with Adapter blocks. Each model uses the text of Proposals to predict their probability of belonging to one of three equally sized groups obtained according to the remote evaluation scores: top, medium or bottom group.

In each model, the 30% of Proposals with higher probability of belonging to the bottom group are identified and flagged as unlikely to succeed. Those proposals which are flagged unanimously by all three models will be sent to experts for validation (see below). Those Proposals flagged only by one or two of the three models will proceed directly to the remote pre-selection phase.

Expert validation:

Every Proposal flagged by the AI tool will be revised by two experts who will confirm whether it is definitely discarded or, on the contrary, will proceed and undergo the evaluation process. Proposals are assigned to experts on the basis of their expertise in the Thematic Area. The validation will be performed by experts who have participated in previous Selection Committees of the CaixaResearch Call. These experts have the final decision on whether the Proposal should undergo remote evaluation. If either of the two experts recommends remote evaluation, the Proposal will be considered eligible.

2.3 Eligibility communication.

If a Proposal is dismissed by the eligibility process (either in the format or content eligibility phase), the “la Caixa” Foundation will send an email notification to the applicant. **No redress or appeal procedure will be admitted.**

**3. Remote pre-selection**

Proposals sent for pre-selection evaluation are reviewed by three or four peer reviewers from the same research field(s) as the Proposal or from a closely related field. This phase of the evaluation is carried out through the online platform.

The evaluation process for the Proposals in this phase is as follows:

- Proposals that fulfill the eligibility criteria will be sent to three peer reviewers for remote assessment.
- Each peer reviewer will assign a score to the Proposal according to the established evaluation criteria. All scores will be normalized (see Box 4- Normalization system).
- The final score for a Proposal is calculated as the average of the normalized scores provided by the three peer reviewers.
- If there is a significant discrepancy regarding a Proposal that may reach the threshold to move on to the next evaluation phase, that Proposal will be sent to a fourth peer reviewer. The final score will then be calculated using the four normalized scores.
- Proposals will be scored and a ranking for each Thematic Area obtained.

3.1 Assignment of evaluators for the pre-selection of Proposals.

The pre-selection evaluation phase is carried out by independent peer-reviewers: renowned experts and researchers from each of the five thematic research areas of this Call. The selection of peer reviewers is conducted at the beginning of the Call by the Grant Project Office. These peer reviewers will have expressed both their willingness to be part of this phase of the evaluation and their suitability for the research field(s) of this Call for Proposals.

Each Proposal will be assigned to and evaluated by three of these peer reviewers, taking into account the keywords listed in the Proposal.

In general, each peer reviewer will evaluate no more than 20 Proposals. However, this threshold may be adjusted based on the number and type of Proposals submitted.

3.2. General considerations and recommendations for evaluators.

Peer reviewers involved in the pre-selection phase will accept an agreement with the "la Caixa" Foundation through the online system, whereby they undertake to maintain the confidentiality of Proposals examined, declare any conflicts of interest, accept the code of conduct and commit to follow the guidelines and recommendations provided by the "la Caixa" Foundation.

Before beginning their evaluation, the best practice is for evaluators to familiarise themselves with the Evaluation Criteria (detailed in Section 7 of the **Rules for Participation**). They should also review this **Evaluation Process Guide** and the **Code of Conduct for Evaluators**. Similarly, it is recommended that they get to know the Call by reading a number of Proposals before starting to evaluate them.

To score Proposals during the pre-selection evaluation phase, peer reviewers will use a scoring scale with the criteria and sub-criteria for evaluation, each of which has a certain weight (detailed in Section 7 of the **Rules for Participation**).

Each peer reviewer must give a rationale (i.e., a qualitative evaluation) as to the different criteria for each Proposal, along with a concise written brief that includes the reasoning behind their evaluation of each Proposal, as well as its strong and weak points. The main objective of the rationale is to ensure objective and well-justified evaluations and to improve resubmission of the Proposal in following editions.

These comments will be made accessible to candidates and members of the Selection Committee, along with the overall score of the Application. Therefore, evaluators should be extremely careful with their wording and respectful of the Proposals presented. Comments should have a strictly professional tone and a constructive spirit. Under no circumstances should comments:

- give information about the identity of the evaluator;
- contain offensive, discriminatory or improper statements; and
- be inconsistent with the numerical score.

In order to allow evaluators to score the Proposals free from pressure and act with maximum independence, the composition of the peer review remote phase will not be made public while the evaluation phases are open. However, once the grants have been awarded, the complete list of evaluators (including full name and institution) who have intervened in the evaluation phases will be published on the "la Caixa" Foundation website.

3.3. Evaluation of a Proposal in the remote pre-selection.

▪ **Scoring scale.**

For each Proposal, **peer reviewers will score each evaluation sub-criterion using a two-decimal number from 1-8** based on following scale of values.

RATING	Exceptional	Excellent	Good	Poor	Very poor
SCORE	7.50 to 8.00	6.50 to 7.49	5.50 to 6.49	4.00 to 5.49	1.00 to 3.99

These scores will be weighted correspondingly and added together to obtain a final score for each Proposal, rounded to two decimal places.

Note that the PL and PIs of Proposals with a final peer-review score < 5.5 will be not eligible to apply to the next Call. Based on previous edition results, only those proposals with a score > 6.5 have the possibility to be funded.

▪ **Aspects evaluated.**

Peer reviewers will carry out the pre-selection evaluation of all Proposals in line with the evaluation criteria described below. To score Proposals, peer reviewers will use a qualification grid with the evaluation criteria to be assessed, each of which will have a specific weight, as will each sub-evaluation criterion.

Each peer reviewer will also provide a rationale, along with a brief written explanation, of the reasons for the score of each Proposal evaluated as well as its strengths and weaknesses.

The same evaluation criteria and sub-criteria will be taken into account for all Proposals, and the established weights that apply to each criterion and sub-criterion, described in the **Rules for Participation document, Section 7**, are also detailed here:

a) Scientific excellence and impact (Weight: 75%):

a.1. Project Quality (30%)

- Potential of the Proposal to go beyond the state of the art and generate groundbreaking, novel and highly relevant results.
- Soundness of the hypothesis, support of the preliminary results and coherence of the objectives.

a.2. Scientific approach and work plan (20%)

- Feasibility and rigor of the methodology and the work plan in accordance with the objectives.
- Proper justification of the timescales, resources and budget necessary to carry out the Proposal.
- Definition of the limitations of the study and contingency plan.

a.3. Impact (25%)

- Scientific impact and social relevance: the extent to which the results of the Project can make a positive, relevant and innovative contribution to the scientific field and/or society.
- Responsible research: detailed analysis of the ethical, legal, social and environmental implications of execution of the Project and/or the potential implantation of its results in society.
- Dissemination and transfer: suitable description of the mechanisms, actions and activities of dissemination, communication, public engagement, valorization and transfer of the Project results.

b) Project Leader and Team (Weight: 25%):

Individual Projects: 25% PL, Team and CSO, if applicable

Research Consortium projects: 12.5% PL, Team and CSO, if applicable / 12.5 % PIs and Teams.

- Professional trajectory and research potential of the PL.
- Adequacy of the role and capacity of the research team members to support the Project execution.
- Suitability and contributions of the Civil Society Organizations in the Proposal.

Research Consortium, if applicable

- Professional trajectory and research potential of the PIs of each Research Performing Organization in the Research Consortium.
- Adequacy of the role and capacity of the Team Members of the Research Performing Organizations in the Research Consortium.

▪ **Pre-selection of Proposals in the remote phase.**

Once the total score for each Proposal is established by each of the three peer reviewers, results are received by the Grant Project Office and an average score calculated. The system monitors the consistency of evaluations amongst evaluators who examine and score the same Proposals, also taking into account the average score of each evaluator for the total number of Proposals evaluated. Scores are weighted according to the matching value associated to the peer-reviewer against the Project.

If there are any significant discrepancies between the scores assigned to a Proposal that may be able to reach the threshold to pass to the next evaluation phase, the “la Caixa” Foundation will send that Proposal to a fourth peer reviewer for evaluation. The average score will then be assigned taking into account the four peer-review evaluation scores.

Proposals will be ranked according to their average score. The best 16 Projects in each Thematic Area will move on to the next evaluation phase.

Once this evaluation phase is complete, Project Leaders will be notified as to whether or not they have been selected.

4. Selection Committees evaluation

Proposals that have been selected for this evaluation phase, i.e. the face-to-face interviews, are reviewed by evaluators from the Selection Committee of the specific Thematic Area for the Proposal. The evaluators of the Selection Committees have not participated in the remote phase of evaluation of the same Call.

4.1. Assignment of evaluators for the Selection Committees.

The Selection Committees are formed by international experts from different disciplinary areas within a Thematic Area. The Committee is characterized by the integration of the knowledge and scientific approaches of its members. These experts will have expressed both their willingness to be part of this phase of the evaluation process, as well as their expertise in the specific Thematic Area of this Call for Proposals.

Experts involved in the selection phase will accept through the online system an agreement with the ”la Caixa” Foundation whereby they undertake to maintain the confidentiality of Proposals examined, declare any conflicts of interest, accept the code of conduct and commit to follow the guidelines and recommendations provided by the ”la Caixa” Foundation.

There are five Selection Committees, one for each Thematic Area. Every Selection Committee will consist of eight to twelve internationally renowned experts.

4.2. General considerations and recommendations for evaluators in the Selection Committees.

Each Selection Committee will receive information about the Proposal and the corresponding Project Leader sufficiently in advance to enable them to adequately prepare for the interviews. The Selection Committees will also have access to the scores and evaluations given to each Proposal by the peer reviewers who were involved in the pre-selection evaluation phase. To the extent that they deem appropriate, evaluators may consider such information when evaluating and scoring the Proposals.

Prior to the Selection Committee meetings, the best practice is for evaluators to familiarize themselves with the Evaluation Criteria (see Section 7 of the Call for Proposals) and the process in general by also reviewing the Selection Committees Evaluation Process Guide and the Code of Conduct for Evaluators. Likewise, it is recommended that they become familiar with the procedure by reading the Online System Manual. Information regarding the pre-selected Proposals of each Thematic Area will be available to all the members of the Selection Committee on the online system at least 3 - 4 weeks before the interviews in Barcelona, on May 30 and 31, 2023. The in-person nature of the Selection Committee meetings will depend on the COVID-19 pandemic situation, leaving open the option to change it to online interviews if necessary. The online system will be open to introduce comments or annotations that may

be helpful during the interviews. Evaluators’ final comments and scores will be introduced into the same online system during the interviews.

Once the grants have been awarded, the complete list of evaluators (by full name and institution) who have intervened in the Selection Committee process will be published on the “la Caixa” Foundation website.

4.3. Evaluation of a Proposal by the Selection Committees.

▪ Scoring scale

The Selection Committee members will score the various aspects of the Proposal after the face-to-face interview evaluation phase in accordance with the evaluation criteria. Each expert on the Selection Committee will score each evaluation block (scientific excellence and impact, and Project Leader and team) using a two-decimal number from 1 to 5 (where 1 is the lowest).

These scores will be weighted correspondingly and added together to obtain a final score for each Proposal, rounded to two decimal places. This score will determine the final ranking of the Proposals of each Thematic Area, and therefore which Proposals will be funded by the Call.

▪ Aspects evaluated

The Selection Committee will carry out an evaluation of all Proposals, including the evaluation of the Proposal documents provided on the online platform and a face-to-face interview with the Project Leader, according to the evaluation criteria. To score Proposals, evaluators will use a qualification grid with two evaluation criteria, each of which has a specific weight and contains specific aspects to consider in the evaluation.

Evaluation criteria are the same for both the remote evaluation and the Selection Committees. Nevertheless, peer reviewers will score each section (4 scores from 1 to 8) while panel reviewers will score by block (2 scores from 1 to 5): Scientific excellence and impact (Weight: 75%) and Project Leader and Team (Weight: 25%).

Each expert will also provide a rationale, in a brief written explanation, of the reasons for the score of each Proposal evaluated as well as its strengths and weaknesses.

▪ Interview content

Face-to-face interviews make it possible for the Selection Committee to detect the quality and consistency of the Proposal being evaluated, based on more detailed and subtle considerations. The interview will make it possible to resolve any questions that arise when reviewing the Proposal and to show the capacity of the Project Leaders to defend their project according to the evaluation criteria.

During the interview, the Project Leader's theoretical knowledge may be tested, although this is not the main objective. First and foremost, interviews are used to judge the merit of the Proposal, based on the evaluation criteria.

The face-to-face interview seeks to:

- expand on the information provided in the Proposal focusing on the scientific excellence and impact of the Project;
- evaluate the Project Leader and team members' scientific and professional potential in relation to their capacity to implement the Project; and
- resolve doubts or consult on matters not included in the Proposal.

▪ **Formal aspects to consider in the interview by evaluators**

- Interviews will be conducted by the Project Leader and will be entirely in English.
- Each interview will last 25 minutes. Project Leaders will briefly summarize their Proposal in 10 minutes. The Selection Committee will then ask any questions they deem relevant in order to properly assess the Proposal (Q&A). If necessary, the PL may be accompanied by up to two Team Members or PIs, who can assist in the Q&A phase.
- After the interview, experts will have 10 to 15 minutes to discuss the Proposal, if necessary, and introduce scores and comments into the system.
- A representative of the "la Caixa" Foundation will chair the interview, enforcing established schedules and moderating the discussion, if necessary.
- There are no established protocols with regard to the form of address. Nevertheless, the interviews must be characterized by their formality and the relevance of the questions.
- Evaluators comprising the Selection Committee will not introduce themselves to the Project Leader. During the face-to-face interviews, a place card will identify the name and Institution of each expert.
- Notes taken on other Project Leaders or documents with their scores should also be kept out of sight of the Project Leader being interviewed.
- In order to ensure confidentiality of internal discussions, the "la Caixa" Foundation will ensure that the Project Leader leaves the vicinity of the room after their interview.
- The Selection Committee should avoid discussing previous interviews when a new Project Leader is entering the room.



5. Feedback to Project Leaders

The Project Leaders will be informed as to whether they have been selected for funding by the CaixaResearch Health Call.

Once the evaluation process is completed, feedback reports will be sent to all Project Leaders. These reports aim to provide Project Leaders with a general understanding of the strengths and weaknesses of their Projects as identified by the experts during the evaluation process.

Specifically, they will contain a quantitative evaluation of the Proposal’s performance in comparison to the rest of the Proposals within the same Thematic Area, and a qualitative comment on the value of the Project.

The reports are intended as an informative tool for the researchers, and no redress procedure will be available at this point.



6. Awarding of the grant

The number of Projects to be granted will depend on the total budget of the Proposals selected. The intention is to distribute the total funding (€20,000,000*) approximately equitably amongst the Thematic Areas, but the final distribution will always depend on the quality and specific characteristics of the Proposals submitted to this Call.

The members of each Selection Committee should express their conformity with the outcome of the process by signing a document that includes the final ranking of the Proposals evaluated.

If a Selection Committee considers the level of the Proposals falls below the minimum standard required for being awarded a grant, any non-allocated budget will be reassigned by the “la Caixa” Foundation amongst the Proposals of the other Thematic Areas following the ranking established by the corresponding Selection Committee.

* This amount is subject to final approval by the “la Caixa” Foundation.

7. Appendix

Remote evaluation final score

Once the remote evaluation process is complete, the system will collect the three scores corresponding to the Proposal. The procedure to obtain the final score that will be used for the ranking is as follows:

- Each peer reviewer will assess each Proposal and assign a score ranging from 1 (min.) to 8 (max.) to each sub-criterion. **The scores for each sub-criterion will be given as a two-decimal number.**
- By means of the weighting associated with each sub-criterion, the system will calculate a weighted score for the Proposal that ranges from 1 to 8. **This number represents the score by that reviewer for a specific Proposal and will be rounded to two decimals.**
- For each Proposal, the Grant Project Office will receive three scores associated to a Project, which will undergo a process of normalization (see Remote Evaluation Normalization Formula). **The final score for a Proposal will be obtained by calculating the average of the three normalized scores and rescaling it to a 1-8 range.**
- If there is a significant discrepancy among the highest and lowest normalized scores of the peer reviewers assessing the same Proposal, that Proposal will be sent to a fourth peer reviewer. The new final score will be calculated as the average of the four scores.

Once the evaluation process is complete, the system will collect the three scores corresponding to the Proposal. The procedure to obtain the final score that will be used for the ranking is as follows:

BOX - Normalization system

Prior to computing the average, the scores are normalized.

Scores are normalized via a two-step process:

1. "Tendency": Scores are normalized according to the standard deviation of the peer reviewer when assessing. The intent is to minimize the existence of a harshness or leniency bias among the reviewers.

2. "Weighted-matching": Scores are weighted according to the discipline-matching value associated with the peer reviewer against the Project. The aim of this step is to value the discipline familiarity of the peer reviewer with the Proposal.

The specific calculations for this procedure can be found in the Remote Evaluation Normalization Formula (steps 2 and 3).

Remote Evaluation Normalization Formula

A = Proposal

p = peer reviewer

w_s = weight associated to each sub-criterion

s = sub-criterion (1.1, 1.2, 1.3, 2)

1 < mark_{A,p} < 8

\underline{E}_A = average score

w_{A,p} = weight of the peer reviewer with respect to the Proposal A

$\frac{w_{A,p}}{\sum_A w_{A,p}}$ = normalized matching- weight

$\frac{w_{A,p}}{\sum_A w_{A,p}}$ correctmark_{A,p} = Final score

Step 1: Calculation of the score for each Proposal according to the weighted sub-criteria:

$$\text{mark}_{A,p} = \sum_{s=1.1, \dots}^2 \text{mark}_{A,p,s} w_s$$

Step 2: Normalization of the score according to the peer reviewer standard deviation:

$$\text{normmark}_{A,p} = \frac{\text{mark}_{A,p} - \text{mean}_p}{\text{Stddev}_p}$$

Step 3: Rescale to the previous range 1 to 8:

$$\text{Rescaled}_{A,p} = \frac{\text{normmark}_{A,p} - \min(\text{normmark}_A)}{\max(\text{normmark}_A) - \min(\text{normmark}_A)} \\ * (\max(\text{originalmark}_A) - \min(\text{originalmark}_A)) + \min(\text{originalmark}_A)$$

Step 4: Corrector factor for peer review with low number of evaluated Proposals:

$$\text{Variation} = \text{Rescaled}_{A,p} - \text{originalmark}_{A,p}$$

$$\text{Corrector Factor}_{A,p} = \frac{\text{number projects}_p}{\text{threshold}(\text{number projects})} ; \text{threshold}(\text{number projects}) \\ = 20$$

If number projects_p > threshold(number projects) → Corrector Factor_{A,p} = 1

$$\text{correctmark}_{A,p} = \text{originalmark}_{A,p} + \text{variation} * \text{Corrector Factor}_{A,p}$$

Step 5: Calculation of the existence of discrepancies:

$$n = \max(\text{correctmark}_{A,p}) - \min(\text{correctmark}_{A,p})$$

Step 6: Calculation of the final score for a certain Proposal:

$$\underline{E}_A = \sum_{p=1}^3 \frac{w_{A,p}}{\sum_A w_{A,p}} \text{correctmark}_{A,p}$$

When there are discrepancies among the peer reviewers, the calculation for the final score would be:

$$\underline{E}_A = \sum_{p=1}^4 \frac{w_{A,p}}{\sum_A w_{A,p}} \text{correctmark}_{A,p}$$

▪ **Selection committee final score**

The final score for a given Proposal will be derived from the calculation of the average of the scores entered into the system by each of the experts for that Proposal (see Selection Committee Normalization Formula).

A final score with two decimal places will be used.

Selection Committee Normalization Formula

A = proposal
 p = expert
 w_c = weight associated to each criterion
 s = sub-criterion (1.1, 1.2, 1.3, 2)
 $1 < \text{mark}_{A,p} < 5$
 \underline{E}_A = average score
 n = total number of experts in the Selection Committee

Step 1: Calculation of the score for each Proposal according to the weighted sub-criteria

$$\text{mark}_{A,p} = \sum_{s=1, \dots}^3 \text{mark}_{A,p,c} w_c$$

Step 2: Calculation of the average score for a certain Proposal. The resulting number is the final score for that Proposal:

$$\underline{E}_A = \frac{1}{n} \sum_{p=1}^n \text{mark}_{A,p}$$