

Health Research
— **Call 2021** —

Evaluation process guide

*Organoids derived from patient with luminal A breast cancer



"la Caixa" Foundation

Health Research 2021

Call for Proposals

***Evaluation
process guide***



1. INTRODUCTION

This guide sets out the procedure for evaluating and selecting proposals in the Health Research 2021– “la Caixa” Foundation – Call for Proposals and contents 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 Health Research 2021 – “la Caixa” Foundation – Call for Proposals:

- **TRANSPARENCY.** Applicants, evaluators and the general public have access to the basic principles that govern the process of evaluating and selecting Proposals and procedures followed for that purpose, which are available on the Call for Proposals website. In addition, Project Leaders receive timely information on the status of the Proposal at each stage of the process and, when appropriate, feedback on the outcome of the evaluation of their 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, not taking into consideration any other factor. All Proposals are treated equally and according to the same evaluation criteria. All Proposals must pass an assessment process conducted by expert, independent evaluators.
- **EFFICIENCY.** The “la Caixa” Foundation grants are characterised by the thoroughness with which the Proposal assessment process is conducted and the rigor in complying with the stipulated procedures. Punctuality in meeting deadlines, which are published, and hence known by Project Leaders, is of the utmost importance. The system has been designed in such a way that evaluators can have sufficient time to perform their scoring with quality standards.
- **QUALITY.** The “la Caixa” Foundation grants are 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 suitably, they are appointed in accordance with their area of expertise.

The evaluation of a Proposal is comprised of a maximum of three phases:

- 1. ELIGIBILITY CRITERIA SCRUTINY:** The Grant Project Office examines all Proposals received by the deadline and rejects those that do not meet the formal criteria published in the Call guidelines or that are incomplete.
- 2. PRE-SELECTION (REMOTE PHASE):** Each eligible Proposal is sent to three or four experts in the research field(s) of the Proposal. After the remote phase, Proposals receiving the highest scores in each Thematic Area will proceed to the next evaluation phase.

3. SELECTION COMMITTEES (INTERVIEW PHASE): 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 8 to 12 experts in the Thematic Area of the Proposal presented.



2. ELIGIBILITY CRITERIA SCRUTINY

The Grant Project Office checks the suitability of the Proposals submitted by the established deadlines and their compliance with the formal requisites of the Call.

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 scrutiny phase.



3. PRE-SELECTION (REMOTE PHASE)

Proposals sent for pre-selection evaluation are reviewed by 3 or 4 peer reviewers, via remote assessment, from the same research field(s) of the Proposal evaluated or from a closely related field.

The evaluation process for the Proposals by each peer reviewer is as follows:

1. Proposals that fulfil the eligibility criteria will be sent to three peer reviewers for remote-assessment.
2. 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).
3. The final score for a proposal is calculated as the average of the normalized scores provided by the three peer reviewers.
4. In case of significant discrepancy in proposals that may reach the threshold to pass to the next evaluation phase, the proposal will be sent to a fourth peer reviewer. The final score will be calculated using the four normalized scores.
5. Proposals will be ranked and a ranking for each Thematic Area will be 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 determined at the beginning of the Call by the Grant Project Office. These

peer reviewers have expressed both their willingness to be part of this phase of the evaluation phase and their adequacy in the research field(s) of this Call for Proposals.

Each Proposal will be assigned to and evaluated by three peer reviewers, selected from the pool of peer reviewers by taking into account the keywords detailed in the proposal.

In general, each peer reviewer will evaluate no more than 20 proposals. However, this threshold might be adapted based on the number and type of proposals submitted for this 2021 Call for Proposals.

3.2. General considerations and recommendations for evaluators

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

Before starting to evaluate a Proposal, the best practice is for evaluators to familiarise themselves with the Evaluation Criteria (detailed in Section 7 of the **Call for Proposals**). They should also review this **Evaluation Process Guide** and the **Code of Conduct for Evaluators**. Similarly, it is recommended that they become familiar with the Call by reading a certain 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 will have a certain weight (detailed in Section 7 of the **Call for Proposals**).

Each peer reviewer must give a rationale (i.e., a qualitative evaluation) of the different criteria for each application 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 provide 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. In any case, comments should have a strictly professional tone and a constructive spirit. In no case should comments:

- Give information about the identity of the evaluator.
- Contain offensive, discriminatory or improper statements.
- Not correspond to or be inconsistent with the numerical score.

So that evaluators can score the Proposals free from pressure and act with maximum independence, the composition of the peer review remote phase will not be made public as long as the evaluation phases are open. However, once the grants have been awarded, the complete list of evaluators (by 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 pre-selection remote phase

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 in order to obtain a final score for each Proposal, rounded to two decimal places.

Aspects evaluated

The 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 criteria.

Each peer reviewer shall 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 evaluation criteria, sub-criterion and aspects that will be taken into account for all projects, and the established weights that apply to each criteria and sub-criteria, described in the **Call for Proposals document, Section 7**, are also detailed here:

1. Scientific excellence and impact (Weight: 75%):

1.1. Project Quality (30%)

- Potential of the proposal to go beyond the state of the art and generate groundbreaking results, novelty and high relevance.
- Soundness of the hypothesis, support of the preliminary results and coherence of the objectives.

1.2. 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.

1.3. Impact (Weight: 25%)

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

2. 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 % PI's 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 of the Project.

Research Consortium, If applicable

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

Pre-selection of proposals for 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 will be 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 scoring of a Proposal that may reach the threshold to pass to the next evaluation phase, the "la Caixa" Foundation will send the Proposal to a fourth peer reviewer for evaluation. The average score will then be created by taking into account the four peer-review evaluation scores.

Proposals will be ranked according to their average score. The best 12-15 projects of each Thematic Area will proceed to the next evaluation phase.

Once this evaluation phase is complete, Project Leaders will be notified whether or not they have passed to the next evaluation phase.



4. EVALUATION BY SELECTION COMMITTEES

Proposals that have passed to this evaluation phase, i.e., the face-to-face interview, are reviewed by evaluators from the Selection Committee of the specific Thematic Area of 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 have both expressed their willingness to be part of this phase of the evaluation process, as well as their adequacy 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 "la Caixa" Foundation whereby they undertake to maintain the confidentiality of proposals examined, declare any conflict 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 per each thematic area. Each Selection Committee will consist of 8-12 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 corresponding Project Leader to be interviewed sufficiently in advance as to adequately prepare for interviews. The Selection Committees will also have access to the scorings 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.

Before the selection committees meeting, the best practice is for evaluators to familiarise themselves with the Evaluation Criteria (detailed on Section 7 of the Call for Proposals) and how the process functions 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. The information of the pre-selected proposals of each thematic area will be available to all the members of the Selection Committee in the online system at least 3-4 weeks before the interviews in Barcelona, in May 27th and 28th 2021. The online system will be opened to introduce comments or annotations that may be helpful during the interviews. In any case, the final comments and scoring should be introduced in 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 Committee Selection process is published on the "la Caixa" Foundation website.

4.3. Evaluation of a Proposal by the Selection Committees

Scoring scale

The Selection Committee shall score the various aspects of the Proposal after the face-to-face interview evaluation phase in accordance with the evaluation criteria. Each Expert of the Selection Committee will score each evaluation block (scientific excellence & impact and project leader and team) using a two-decimal number from 1 to 5 (being 1 the lower and 5 the higher scores).

These scores will be weighted correspondingly and added in order to obtain a final score for each Proposal, rounded to two decimal places, which will determine the final ranking of the Proposals of each Thematic Area to be awarded.

Aspects evaluated

The Selection Committee will carry out an evaluation of all Proposals that includes the evaluation of the proposal documents provided online and a face-to-face interview with the Project Leader, in line with the evaluation criteria. To score Proposals, evaluators will use a qualification grid with two evaluation criteria to assess, each of which has a specific weight and contains specific aspects to consider in the evaluation. Criteria are described in Section 7 of the **Call for Proposals** and detailed here:

1. Scientific excellence and impact (Weight: 75%):

1.1. Project Quality

- Potential of the proposal to go beyond the state of the art and generate groundbreaking results, novelty and high relevance.
- Soundness of the hypothesis, support of the preliminary results and coherence of the objectives.

1.2. Scientific approach and work plan

- 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.

1.3. Impact

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

2. 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 % PI's 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 of the Project.

Research Consortium, if applicable

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

Each Expert shall also provide a rationale, along with a brief explanation in writing, 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 Expert Selection Committee to detect, based on more subjective, fine and subtle considerations, the quality and consistency of the Proposal being evaluated. The interview will make it possible to resolve any question not reflected in 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, considering the evaluation criteria.

The face-to-face interview seeks to:

- Deepen the information provided in the Proposal focusing at the scientific excellence and the impact of the project.
- Evaluate the Project Leader's and team members scientific and professional potential in connection with his or her capacity to implement the project.
- Ask about matters which were not included in the Proposal.

Formal aspects to consider in the interview by evaluators

- Interviews will be conducted by the Project Leader entirely in English.
- Each interview will last 25 minutes. Project Leader will briefly summarize his or her Proposal in 7 minutes. Then the Expert Selection Committee will ask the questions that they deem relevant in order to properly assess the Proposal. If needed, the PL may be accompanied by up to 2 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 needed, and introduce scores and comments to the system.
- A representative of "la Caixa" Foundation will ensure the correct development of the interview, including the established schedules and the moderation of the discussion, if needed.
- There are no established protocols with regard to the form of address. Nevertheless, the interviews must be characterized by their formality and relevance of the questions.
- Evaluators comprising the Selection Committee of Experts will not introduce themselves to the Project Leader. During the face-to-face interviews, a label 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 visual reach of project leaders.
- In order to ensure confidentiality of internal debates, "la Caixa" Foundation will make sure that the Project Leader adequately leaves the surroundings of the room after their interview.
- Selection Committee of experts should avoid mentioning previous interviews when a new Project Leader is entering the room.



5. FEEDBACK TO PROJECT LEADERS

The Project Leaders will be informed of having been selected or not to be awarded with Health Research 2021 “la Caixa” Foundation.

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

Specifically, it will contain a quantitative evaluation of their proposal performance in comparison to the rest of the proposals within the same thematic area, and a qualitative comment on the intrinsic 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 (€15,000,000*) of the Call for Projects approximately equitably amongst the Thematic Areas, but the final distribution will always depend on the quality and the specific characteristics of the Projects submitted to this Call.

The members of each 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 Committee considers the level of the Proposals not to reach the minimum required for being awarded a grant, budget not allocated will be reassigned by the “la Caixa” Foundation amongst the proposals of the other thematic areas following the ranking established by the corresponding Committee.

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

7. APPENDIX

Remote evaluation final score

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

- Each peer reviewer will assess each proposal by assigning 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 weights 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.**
- In case there is a significant discrepancy among the highest and lowest normalized scores of the peer reviewers assessing the same proposal, the proposal will be sent to a fourth peer reviewer. The new final score will be calculated as the average of the four scores.

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

BOX - Normalization system

Prior to computing the average, the scores are normalized.

The scores are normalized in 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 intent of this step is to valorise 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 (step 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

\bar{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 few number of proposals evaluated:

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

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

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:

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

In case 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 certain 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:

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