

ERC EVALUATION PROCESS



Professor Maria Attard

University of Malta

ERC Evaluator and Chair, SH2 Panel



ERC Principles

- Excellence. Projects selected for funding must demonstrate a high scientific and/or technical quality.
- Transparency. Funding and award decisions must be based on clearly described rules and procedures, and applicant legal entities and principal investigators should receive adequate feedback on the outcome of the peer review evaluation of their proposals.
- Fairness and impartiality. All proposals shall be treated equally. They must be evaluated impartially on their merits, irrespective of their origin or the identity of the submitting entity, the principal investigator or any team member.



ERC Principles

- Confidentiality. All proposals and related data, knowledge and documents communicated to the ERCEA must be treated in confidence.
- Efficiency and speed. Peer review evaluation, preparation and award of grants should be as rapid as possible, in accordance with the requirements set out in the legislation, while maintaining the quality of the peer review evaluation.
- Ethics considerations. Any proposal which contravenes ethical principles may be excluded from the peer review evaluation, selection and award procedure at any time.
- Research integrity considerations. The breach of research integrity rules may result in the rejection of a proposal at any time.



Key Considerations

- Timing
- Grant type
- Rules for

Participations

and Submission

STG

Starting Grants

(2-7 years after PhD)

up to €1.5 Million for 5 years + €500,000 COG

Consolidator Grants

7-12 years after PhD)

up to €2 Million for 5 years + €750,000 ADG
Advanced Grants

10 years' track-record

up to €2.5 Million for 5 years + €1 Million

Proof-of-Concept -PoC

bridging gap between research –
earliest stage of marketable innovation
up to €150,000 for ERC grantees

Synergy Grant - SYG

2-4 Principal Investigators up to €10 Million for 6 years + €4 Million

Scientific Excellence as the sole criterion for evaluation



Insights into the Evaluation Process



Independent Experts

- The evaluation process is handled by ERCEA with the support of independent experts.
- In selecting these experts the ERC ensures gender balance, geographical diversity and regular rotation. The expert names are published at the end of the process.
- <u>No contact can be done with the experts</u> (panel members) by the principal investigator or related institution. When this happens the ERCEA rejects the proposal in question.
- Applicants might request the exclusion of experts specifying the reasons for such a request.



The evaluation criteria

- The evaluation criteria cover two main elements:
 - the research project, and
 - the principal investigator.
- The research project is further subdivided between the groundbreaking nature and potential impact of the project, and the scientific approach.

1. Research Project - Ground-breaking nature, ambition and feasibility

Ground-breaking nature and potential impact of the research project

- To what extent does the proposed research address important challenges?
- To what extent are the objectives ambitious and beyond the state of the art (e.g. novel concepts and approaches or development between or across disciplines)?
- To what extent is the proposed research high risk/high gain (i.e. if successful the payoffs will be very significant, but there is a higher-than-normal risk that the research project does not entirely fulfil its aims)?

Scientific Approach

- To what extent is the outlined scientific approach feasible bearing in mind the extent that the proposed research is high risk/high gain [based on the Extended Synopsis at step 1]?
- To what extent are the proposed research methodology and working arrangements appropriate to achieve the goals of the project [to be assessed at step 2 based on parts B1 and B2]?
- To what extent does the proposal involve the development of novel methodology [to be assessed at step 2 based on parts B1 and B]?
- To what extent are the proposed timescales, resources and PI commitment adequate and properly justified [to be assessed at step 2 based on parts B1 and B2]?



2. Principal Investigator - Intellectual capacity and creativity

- To what extent has the PI demonstrated the ability to conduct ground-breaking research?
- To what extent does the PI provide evidence of creative independent thinking?
- To what extent does the PI have the required scientific expertise and capacity to successfully execute the project?

A competitive STG PI must have already shown the potential for research independence and evidence of maturity, for example by having produced at least one important publication as main author or without the participation of their PhD supervisor. A competitive COG PI must have already shown research independence and evidence of maturity, for example by having produced several important publications as main author or without the participation of their PhD supervisor.

All PIs should also be able to demonstrate a promising track record of early achievements appropriate to their research field and career stage, including significant publications (as main author) in major international peer-reviewed multidisciplinary scientific journals, or in leading international peer-reviewed journals of their respective field. They may also demonstrate a record of invited presentations in well-established international conferences, granted patents, awards, prizes etc.





The evaluation process

- Peer review of projects is carried out by a panel of independent scientists and scholars, operating under a Chairperson who is an independent expert proposed by the Scientific Council.
- Each proposal is reviewed by at least three reviewers who draw up individual assessment reports.
- Panel assessment is carried out to ensure coherence and consistent treatment of all proposals.
- Judgement of proposals, including the ranking is based on both the individual reports and the panel discussion.
- Where interviews are required at least three panel members will coordinate the questions to the PI.



The ERC Panels

- Choosing the right panel is critical. Do not add panels to your proposal in the hope that it fits somewhere.
- https://erc.europa.eu/news/new-erc-panel-structure-2021-and-2022

Physical Sciences and Engineering

Life Sciences

Social Sciences and Humanities



Writing a good proposal

- The proposal needs to focus on a fundamental problem. Ideally a an important challenge with potential ground-breaking impact.
- Having said that, the problems needs to be written clearly for both experts and non-experts in the panel to understand.
- Being an expert you should write clearly why you think the challenge (problem) is worth funding, including a very good review of the stat-of-the-art in the field and the potential outputs and limitations (risks).
- The state-of-the-art might also be in the approach to the problem. So think also about the methodology and state it clearly and in a structured manner.



Writing a good proposal

- In your wider description of the proposal be clear but thorough in the description of the objectives and methods, and the resources required to achieve the project goals.
- Structure well the work packages and ensure there is integration between the various tasks. ERC grants are not going to support just a number of PhDs or research tasks. There should be a clear aim for the project and each work package and task must lead to the fulfillment of that task.
- Identify well the risks and propose feasible mitigation measures to convince the evaluator that you have a good understanding of what is being proposed.
- Justify well the resources requested in the budget.



Writing a good proposal – the PI

- The Panel and the evaluators look for good PIs in terms of research experience and publications, but also skills in managing researchers, effective dissemination, experience in participating in projects, participation in academic events and networking.
- Make sure to highlight major achievements, preferably those made independently from others and your contribution to the field.
- Ensure that in highlighting the expertise, the PI does not give the impression that the proposal is just a continuation of on-going research.
- If this is a collaboration, clearly describe the role of the PI and the outputs which will be funded and attributed to the ERC grant.



The interview

- This is an opportunity to add value to your proposal.
- The presentation must be very focused on the evaluation criteria of
 - (i) what is the project and does it address an important challenge
 - (ii) the ambition of the project
 - (iii) the scientific approach
 - (iv) the potential impact
 - (v) why the PI?
- Keep answers to the questions short so the panel can put forward all the questions they have. The more questions you are able to answer, the better informed the panel is to make the right decision about your proposal.



Conclusion

- The process of applying for an ERC grant has to be seen as an opportunity to learn about yourself and your work.
- Diligence in the process is necessary because competition is big.
- Focus on excellence. That is the single most important thing for the ERC.
- Be thorough in the preparation of your proposal and do not leave anything to chance.
- Be prepared to answer specialist but also generalist questions about your proposal.
- Most important is to enjoy and learn from the process.









References

- Rules for Participation in H2020 Programme
 (https://ec.europa.eu/research/participants/data/ref/h2020/leg
 al basis/rules participation/h2020-rules-participation en.pdf)
- ERC Rules for Submission and Evaluation (https://ec.europa.eu/research/participants/data/ref/h2020/sgl/erc/h2020-erc-se-rules-amended2 en.pdf)

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