

EUROPEAN RESEARCH COUNCIL



ERC TRAIN

How to apply for the Starting Grant

There are several individual researchers' grants available for researchers within life sciences. But how do you know you are ready to apply for a personal grant?

This guide has been realised thanks to the ERC TRAIN project, funded by Cariplo Foundation and Lombardy Region, with the aim of supporting at least 10 young researchers in the presentation of their proposal Starting Grant.

Sommario

Introduction	2
Useful background on EU funding applications.....	2
About ERC	2
Before you start writing your ERC application.....	3
Eligibility criteria for a Starting Grant application.....	4
Track record should list:	4
Scientific excellence	4
Innovation beyond current limits.....	4
It's all about your CV	5
Who can apply?.....	5
What about the application procedure?	6
What do I have to include in my application?	6
Writing the ERC application	7
Administrative form, Extended synopsis and proposal sections	7
How are applications evaluated?	8
Tips on applying for an ERC grant	9
References.....	10

Introduction

Horizon 2020 is the EU's current research, innovation and development framework, offering €80 billion in grant funding to researchers over a seven-year period (2014-2020). It differs from its forerunner, FP7, in that it combines all funding directives into a single program for innovation, education and R&D. The framework splits the majority of the available assigned funds between three areas: 'excellent science' (€24.4 billion), 'industrial leadership' (€17 billion) and 'societal challenges' (€29.7 billion). There are also a few other areas, for example 'science with and for society' and 'spreading excellence and widening participation'.

The main aim of the European Commission in outlining the new program was to simplify and streamline the funding and application processes. One additional goal was to cut decision times on successful applications from an average of an year to eight months. The Horizon 2020 scheme provides a 100% reimbursement of direct costs for research projects and a 25% refund of indirect costs.

Useful background on EU funding applications

To apply for funding, researchers must go through the open calls for proposals, submit their project electronically and abide by the deadlines stipulated. Some applications involve a two-stage submission in which an initial short proposal, if successful, will require a further full proposal.

In order to apply, your organization needs to be registered and have a 9-digit Participant Identification Code (PIC). All current open calls for proposals are available on the participants portal, where you can perform an advanced search by topic. Applications are open to those outside Europe and researchers with a non-EU nationality are encouraged to apply. However, the calls for proposals state that the research institution where the project is carried out must either be located in an EU Member State or associated country, or it must be an International European Interest Organisation (e.g CERN, EMBL, etc.). Further information on what count as associated countries is listed here. You can also direct general enquiries to the National Contact Point in your country.

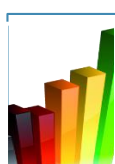
As an example of the available grants' application process, we'll be covering the stages of applying for European Research Council (ERC) grants that fall under the 'excellent science' category of the EU research call for proposals. ERC grants constitute a significant pooled budget of over €13 billion in funding.

About ERC

ERC grant funding covers any individual research projects that are pioneering in frontline research, for example life sciences, physical sciences and engineering and social sciences. They emphasize that their main selection criteria is the researcher and project's scientific excellence. They also prioritize projects with high risk but high gain potential. Currently, five types of grants are available.

- ERC Starting Grant. This is an award of up to €2M which requires you to have completed your PhD. 2-7 years before the publication date of the grant call. In addition, you must have at least one key publication in a high-ranking journal without the help of your PhD supervisor.

- ERC Consolidation Grant. This follows on from the Starting Grant and has an award of up to €75M, aimed at those who completed their PhD. 7-12 years prior to applying. Grant criteria stipulate that the researcher should have an excellent track record and should have shown independence and research maturity, with several high-impact publications under their belt.
- ERC Advanced Start Grant. This is subsequent to the Consolidation Grant, based on increasing levels of research experience. Here applicants must have a significant track record of research achievement gained in the last 10 years. The award is up to €5M in value.
- ERC Proof of Concept Grant. In order to qualify for this fourth type of grant, you must have previously received an award from the ERC. Additionally, you must demonstrate that you have research outputs that can be turned into a valuable commercial or social proposition. If successful, the grant award is up to €150M in value.



ERC STARTING GRANTS
(early career) – up to 1.5 ML per grant



ERC CONSOLIDATOR GRANTS (independent researchers) – up to A 2 ML per grant



ERC ADVANCED GRANTS (senior researchers) – up to 2,5 ML per grant



ERC PROOF OF CONCEPT GRANTS (only for ERC funded projects) – up to € 150.000 per grant



Before you start writing your ERC application

- Search for previous ERC grantees within your field of research for comparison and in order to find out who you are up against. Make sure your CV is competitive for ERC (if it is not, look into how you can improve it!).
- Try to get ahold of successful ERC Applications in your field of research, then read and analyze them in order to get an idea of what it takes to write a successful ERC application in your field.
- Look up ERC panel members and evaluators; it can be helpful to know which ERC-panel to apply to.
- There are 25 panels in total (9 in life science, 6 in social sciences and humanities, 10 in physical sciences and engineering) – make sure to choose the right panel.

- Carefully read the ERC Work Programme and the Information for Applicants guide with respect to the particular call to understand the grant scheme and what is expected of an ERC applicant, as well as how to address the different parts of the ERC proposal.
- Begin in due time so you have time to get scientific feedback from peers. This could be six months or even longer before the deadline. Six weeks full time is what we often hear successful ERC grantees state they have used on their ERC application. Do not underestimate the application.
- Set time aside to write and revise your ERC application. Set time aside so you can get feedback from peers in Denmark and abroad and be sure you have time to use their feedback and comments.
- When you are applying for an ERC Starting or Consolidator Grant you have a five years window to apply in; do not wait to the last year to apply. The evaluators will take into account where you are in your career/your track record – so if you have an excellent idea, do not hesitate to apply even if your Ph.D. is just two or three years old.

Eligibility criteria for a Starting Grant application

Below we provide a comprehensive overview of which ERC Starting grant applies to which stage of your career and the specific requirements of these grants. Promising early-career researchers should have 2-7 years of experience after being awarded their PhD.

Track record should list:

- Up to 5 publications in major international peer-reviewed multi-disciplinary scientific journals and/or in the leading international peer-reviewed journals, peer-reviewed conferences proceedings and/or monographs of their respective research fields, highlighting them as main author or without the presence as co-author of their PhD supervisor
- Research monographs and any translations
- Granted patent(s)
- Invited presentations to internationally established conferences and/or international advanced schools;
- Prizes/ Awards/ Academy memberships.

Scientific excellence

There are three core ERC funding schemes that can be applied to by independent researchers, depending on their career stage: starting, consolidator and advanced grant. The main criterion for obtaining an ERC frontier research grant is scientific excellence. Candidates should represent the top 3% in their peer group and should pursue ground-breaking, high-risk/high-gain research. This scientific excellence should be demonstrated by an excellent track record, with highly cited papers in top journals.

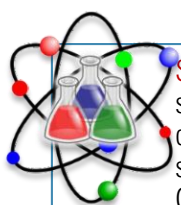
Innovation beyond current limits

Another prerequisite for obtaining an ERC grant is the innovative nature of the research proposal. Applying scientists should push innovation beyond its current limits with their research proposal. The ERC puts particular emphasis on the frontiers of science (high-risk/high-reward).

This means that proposals are encouraged to show a multi or interdisciplinary nature which crosses the boundaries between different fields of research, addressing new and emerging areas of research or introducing unconventional, innovative approaches and scientific inventions.

It's all about your CV

When applying for an ERC starting grant, the scientific excellence of your research should also be reflected in your CV. Young researchers (at least 2 years of experience since completion of their PhD) should show mobility, demonstrated by their willingness to relocate to a different research institute or country if this benefits their research. Senior researchers should have a clear track record, having established their own successful and innovative research line. Their established research line should serve as a platform for further ground-breaking discoveries. Your independence and excellence as a researcher is furthermore reflected by the number of PhDs and/or postdocs you have supervised, your H-index, international experience and even (at later stages) by the set-up of your own company.



SCIENTIFIC EXCELLENCE is the only selection criterion (PEER REVIEW PANEL composed of internationally renowned scientists, selected by ERC Scientific Council)



Requested a «**BOTTOM-UP**» approach without defining defined priorities, developing proposals from **INTERDISCIPLINARY, EMERGING AND NON-CONVENTIONAL NATURE**



The funding covers a period of **5 years** and **100% of DIRECT COSTS OF RESEARCH**, plus a contribution for indirect costs (25% excluding sub-contractors and third parties involved)



The ERC grant is "**PORTABLE**" ie, the PI can evaluate transfer all or part of the funding to a new payee (according to the conditions of the Grant Agreement)



ERC is open to researchers of **all nationalities** and in particular encourage the "return" to Europe of researchers based abroad (HOST Institution must be from a EU MEMBER STATE)



ERC finances only **PI AND THEIR TEAM** (NOT CONSORTIUM) operating at a Host Institution

Who can apply?

An applicant to the ERC can be of any nationality or country of residence. She or he will be considered as a sort of 'principal investigator' responsible for carrying out the project. The project can also contain a list of other researchers and academics involved in the research.

Applications to the ERC must be made in coordination with a host organization in one of the EU or associated countries. As an alternative, this organization can be an international European Interest Organization or the JRC. You have to receive a declaration of interest from this organization in order to be able to apply.

Note that the organization will not only send the application to the ERC but it will also, if the application is successful, administer the research fund. The management of the research fund will be the responsibility of the principal investigator.

What about the application procedure?

Applications, including the administrative forms, research proposal and supporting documentation, must be sent via the Electronic Proposal Submission System. They will be directed to the ERC panel that corresponds to the discipline and subjects of the research proposal. Applications go through a first and eventually a second stage. In the first stage, the ERC panel's focus is very much on the quality of the application. In the second, the focus shifts to the quality of the applicant. If you go through both of these stages, you will be invited to an interview to discuss your project in person.

What do I have to include in my application?

The STG application has three parts:

- **A fair portrait of yourself as the principal investigator.** This includes your CV, a self-evaluation of your research achievements, and your 'funding ID'. The latter is an account of your past and present research projects that should provide a reasonable correlation between the research funding that you received and the outcome of your research: this will show the reviewers whether you can meet their expectations. You should devote three pages to this section in the first stage of your application and eventually four in the second stage.
- **An accurate research proposal.** This should contain a description of the state of the art of research on the topic you deal with, the objective of your research, the methodology, the resources you need to carry out the research, and ethical issues. This section should occupy four pages in the first stage, ten in the second (this will be the core of your application)
- **A description of the research environment in which you will do your research.** You should elaborate on the steps you will take towards becoming an independent researcher and how the host institution will meet your research needs. You should also provide a budget and references to your research team. With respect to the latter, you should include academics involved in the project and any research assistant that you will need to support the research. This section should be one page long in the first stage, two in the second.

Finances

The STG, like other ERC grants, covers all the eligible direct costs, plus up to 20% of all the eligible indirect costs.

Eligible costs are those immediately related to the realization of the project: research, management, training and dissemination activities. Examples are: personnel and equipment costs, consumables, travel and subsistence costs, and publication costs.

Eligible indirect costs are only indirectly related to the conduct of the research. These comprise administration and management, office and lab space, maintenance and insurance, communication expenses (network connections and postal charges), and office equipment (PCs, laptops, software) costs.

Writing the ERC application

- Find a truly excellent idea for your ERC project. This idea will be the foundation for your project aims/ hypothesis/project questions. It must be ambitious and timely! It must be high risk – high gain. It must be aimed at ERC and not just being a casual post doc project. Make sure it is clear why the ERC project you propose should be carried out at the time you are writing and make sure it is clear why it should be you doing it.
- Keep in mind that an ERC project is not a “Research and Innovation Action” (RIA) type of project or a project for your national research council. Do not make a consortium. Describe your team/or describe that you will set a team, but do not waste too much time on this. You are the only one being evaluated – only your CV matters. Be visible as a PI in the application text: it will be your project and you will be the leader, so do not be too shy or too modest. Refer to earlier works and achievements. Write “I will...”, “I have...” etc.
- Demonstrate a deep knowledge of state-of-the-art in your field(s) and prepare to substantiate how your ERC project will be able to go beyond said state-of-the-art
- Have a strong focus on methodology and methods – describe your methodology briefly but in a clear and convincing fashion in part B1 and go into details in part B2. Your methods must be state-of-the-art and beyond, but they could also be high risk – high gain or groundbreaking methodologies
- Make sure to describe high risk – high gain thoroughly. Do so both in part B1 and B2. Sometimes it makes sense to describe it in a separate section or a table.
- Make sure your project really is an ERC project: is it truly excellent? Can it last up to five years? Will it provide ground-breaking research?
- Make sure to describe scientific impact. How will your ERC project move science in new directions?
- Make sure your ERC application is well written with no grammar or spelling mistakes and make sure that it is well structured. Make sure that the parts the evaluators read first, i.e. the title, the acronym, the summary and B1 are a pleasure to read – so as to make the evaluators eager to read the full proposal.

Administrative form, Extended synopsis and proposal sections

Although they may seem lengthy, the administrative and summary forms required to apply for an ERC grant are straightforward,. It is essential to read the information for applicants for the specific ERC grant you are applying for (see the links at the end of the blog). Leave plenty of time so you can prepare each section with due care and attention. Moreover, it is important to allow time for colleagues to review your application before you submit. Successful applicant researchers we spoke to spent between 3 months to 1 year preparing their ERC grant.

There are two stages to submitting the application. The first section (B1) consists of a 5 page synopsis of the project, with an accompanying 2 page CV and a track record document. Note that in the initial stage, this is all that is seen by the reviewing panel and they base their full decision on it, so it has to be outstanding.

Each panel normally consists of 10-15 experts in your field who may not be in your direct area of expertise, so aim for clarity and concise statements on the significance of the project for a lay research audience. They are looking for individuals that demonstrate a rigorous scientific approach and strong management skills.

Include succinct objectives, as well as details of the scientific feasibility of the project with some preliminary data. Use this section to balance out the high risk, high gain aspects of the research. Your CV should be compelling and informative, and together with your track record showcase your expertise and excellence in your research field.

At this first stage the panel evaluates your proposal and grades your application A, B or C. Only those applications that receive an A grade are deemed high quality and will progress to the second stage. In past years one quarter of all applications received a grade A to make it through to the second stage.

It is at this point the second part of your application (B2) is taken into consideration. This consists of a 15 page explanation of your project. It must include detailed objectives, methodology and resources, including time commitments and budget. Make sure you include details of the team members involved and what they will be doing. Make the reviewers task easier by breaking up the prose with relevant figures and data. Again, ensure you have plenty of time to prepare this part of the application. Get colleagues to review it and use any support available to you, such as your institute's grant office, to help.

If you are successful after the first stage of the application you will be invited to an interview in Brussels, where you give a ten minute presentation about your project. Advanced preparation with plenty of rehearsal is key to achieving the clarity the panel are looking for. Successful candidates we spoke too had spent a month preparing and rehearsing the presentation in front of peers. Preempt any doubts that may arise over scientific weaknesses in the project by explaining how you will deal with them. Ensure you provide preliminary data and demonstrate how you would problem-solve if any road blocks occurred. Project your enthusiasm and commitment to the project to the panel. Finally, the panel are looking for a certain degree of honesty, so do not be tempted to over-stress the scientific impact of your work.

Based on your B2 form and interview, your final application will be evaluated and graded A if it is excellent enough to be funded. On average, 40% of grants meet the ERC's excellence criterion and receive a grant award at this second stage.

How are applications evaluated?

The main criterion that guides ERC panels in the selection of proposals is scientific excellence. ERC panels are composed of academics of different nationalities and from different academic backgrounds, who may disagree about and extensively discuss on a project, but will ultimately rely on its quality as a common denominator for deciding which applications are successful. The specific evaluation criteria can be found in the applicant guide.

Each of the three parts of the project are scored by the ERC panel. In order for the project to be considered, both the first (principal investigator) and the second (research proposal) parts have to obtain a score of at least 4 (each). With respect to the third part (research environment), a pass/fail judgement is made. Overall, the proposal needs to achieve a score of at least 8 (out of 10) to be considered in stage 1 for stage 2 or to be awarded funding in stage 2. However, in both stages the ultimate decision depends on the ranking in which the proposals are ordered according to score.

Tips on applying for an ERC grant

- **Pay attention to the overall quality of the project.** Remember that a good idea is not necessarily a good project. The ERC received thousands of projects during the first call, and a huge number of them were not accurately drafted and 'crafted'. With respect to this, support from your host institution may be crucial. In general, applicants from some countries (such as the UK, Germany, Switzerland, and Israel) performed better than those from other countries because they had the support of academic cultures and institutions which paid a lot of attention to the formalities and content of research proposals.
- **Each part of your application should respond to standards of quality.** Highlight your potential, creativity and intellectual capacity as principal investigator. In your research proposal, emphasize the innovative nature of your study and its prospected impact on the discipline and theme that you want to deal with. When providing information on the research environment, accurately explain the relation between, on the one hand, your host institution and research team, and on the other the potential of your project and its outcome.
- **You need to position your research within a certain discipline and theme in a clear and precise way.** In this respect, clarify well the state of the art of the subject that you deal with. At the same time explain your personal approach to the subject compared to that of other researchers. The point is to show ERC panelists what field you are entering, which topic, and your personal way of cutting through both.
- **Methodology matters.** Of course, depending on the discipline, you can expect more or less attention from panelists on this issue. As a rule, remember that providing evidence that you have an interesting topic or material on which to work means little if you do not provide a convincing way of treating this material.
- **You should include a working hypothesis in your project.** This does not mean providing the conclusions. However, it is important to show in what direction you want to steer your research.

Accurately plan the money and time that you will need to carry out the project. A lot of applications were eliminated at an early stage because applicants budgeted an excessive amount of money to complete the research, or stretched the research schedule to an unrealistic period of time. Many applicants were clearly driven by the richness and duration of the SIRG, which fits more long-term, expensive lab-based natural science research projects than the average single-researcher study in the social sciences and humanities. However, avoid this type of mistake: be realistic on matters of money and time.

- **English is preferred but not compulsory.** You can draft your project and do the interview in any of the official EU languages. For obvious reasons, many applicants opt for English, and it is true that this can facilitate comprehension by members of ERC panels. However, using English should not undermine the readability of the project. Many applicants performed poorly during interviews because of their limited capacity to formulate and express thoughts in English. Therefore use English only if you are actually able to use it and to express your ideas in a clear and understandable way.

Take care of your writing style. Make your application 'rhetorically convincing'. ERC panelists have to go through a lot of applications: you need to capture their attention by helping them to understand what your project is about and by providing valid arguments why you should receive a grant.

References

<http://cordis.europa.eu/>

<http://cordis.europa.eu/fp7/dc/index.cfm>

<http://erc.europa.eu/>

http://erc.europa.eu/pdf/erc_guide-for-applicants_stg.pdf

<https://erc.europa.eu/document-category/work-programmes>

<https://erc.europa.eu/document-category/evaluation-panels>

<https://erc.europa.eu/projects-figures/erc-funded-projects>

<https://erc.europa.eu/funding/frequently-asked-questions/results>