#YouCanMakeItHappen: a personal(ized) guide to an ERC grant application

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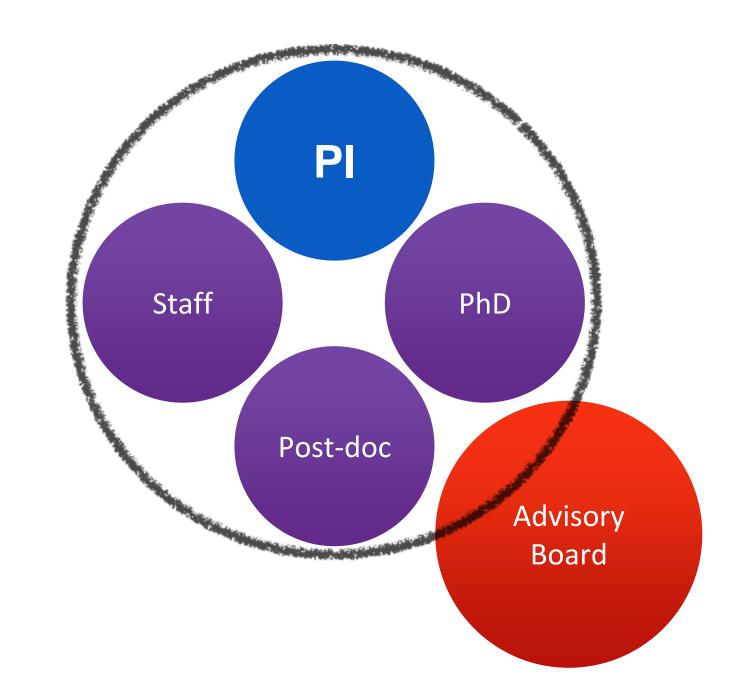
The ERC grants

- Basic and applied research, any field of science/ engineering
- Support to independence: starting, consolidating or established (advanced)
- Any nationality
- Any age
- Host institution in EU Member state or Associated Country
- Portable personal grants



g hed (advanced)

The "individual" research team concept...





... and the "frontier research" notion.

Creating new knowledge/insight leading to change

Opening up new research opportunities

New concept/ paradigm/ indicator

Long term achievement of new products / processes



New analytical / methodological framework



New mathematical tool

New technology/ method/ device

New conceptual / theoretical framework

Profile of PI – Starting and Consolidator

Promising track record of early achievements, e.g. through significant publications as ulletmain author...

[in major international peer-reviewed multidisciplinary journals Or the leading international peer-reviewed journal(s) of respective field]

... or without PhD supervisor. \bullet

StG: at least one, CoG: several

Invited presentations, awards, patents, ... \bullet

Starting 2-7 yrs past PhD 1.5 M€ 0.5 M€ extra



Consolidator 7-12 yrs past PhD 2.0 M€ 0.75 M€ extra

Profile of PI – Advanced

- Active and prominent researcher
- Track-record of significant achievements in the past 10 years:
 - main contribution to research field
 - ability to change research fields
 - international recognition
 - inspiration of younger researchers
 - leadership in industrial innovation



Advanced 10+ yrs past PhD 2.5 M€ 1.0 M€ extra

What's most important?

High-risk Ambition Novelty



Feasibility

"We are looking for excellent scientists with a vision and brilliant plans to achieve that vision, rather than individual research projects."



ERC panel member

Vision... and feasibility!

High-risk Ambition Novelty



"The way I perceived it.... Of all criteria, the ERC is most excited about <u>'high-gain'</u> of a project." Consolidator grantee 2015



Information on methodology Preliminary data Contingency plan Proven expertise



Know you can do it!:

- Define your vision
- Define "yourself"!

Define your venture in "whys":

- Why this research program?
- Why you?
- Why now?



Questions applicants should ask themselves

- Am I internationally competitive as a researcher at my career lacksquarestage and in my discipline?
- Am I able to work independently, and to manage a 5-year project with a substantial budget?
- Why is my proposed project important?
- Does it promise to go substantially beyond the state of the \bullet art?
- Why am I the best/only person to carry it out?
- Is it timely? (Why wasn't it done in the past? Is it feasible \bullet now?)
- What's the risk? Is it justified by a substantial potential gain? Do I have a plan for managing the risk?





European Research Council

Established by the European Commission

Tackling the ERC – what the experts recommend

- start early! make a plan (eligibility window, best timing in career)
- benchmark yourself : who are your competitors? who is your "**ERC audience**"?
- find a mentor amongst peers (preferably with ERC experience)
- make a **plan for writing**: involve colleagues for content input, and if possible/ necessary, a science editor
- write clearly, to the point, keeping energy high
- have the **evaluation criteria** as your guide
- allow yourself time to fine-tune, refine

"Writing the proposal is an excellent way to generate and polish ideas."





Consolidator grantee 2015

(Most) Basic rules of the game



Your audience: the ERC panel

Three domains, 25 panels:

- Physical Sciences and Engineering
- Life Sciences
- Social Sciences

Where does your main impact lay?

Which panel is most likely to appreciate your objectives?

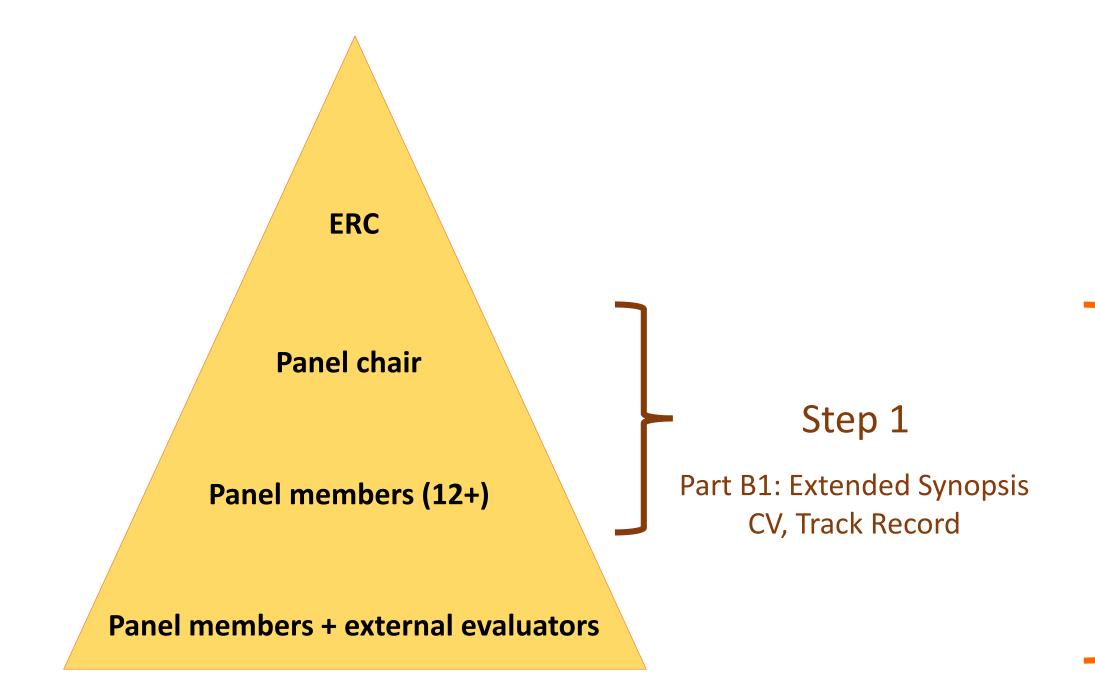
Facing which audience can you defend yourself best?

- Select based on the panel(s) keywords
- Define your keywords (the "free keywords")
- <u>Check previous panel members/ evaluators</u>
- <u>Check laureates</u>



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The evaluation process

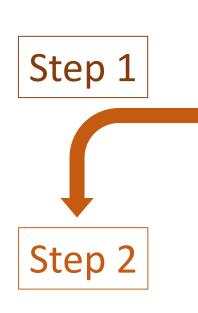




Step 2

Part B1 + B2: Full proposal CV, Track Record

The scoring system



C: not of sufficient quality for ERC B: of high quality, but not sufficient for step 2 A: of sufficient quality to pass to step 2

B: meets some but not all excellence criteria A: excellent, will be funded if sufficient funds available

Resubmission rules (step 1)

B: may not submit in the next call

C: may not submit in the next **two** calls



Evaluation criteria are interrelated



Research project





erc

Ground-breaking nature, ambition and feasibility. Intellectual capacity, creativity and commitment. 1. Research Project

Ground-breaking nature, ambition and feasibility

Starting, Consolidator, Advanced and Synergy

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? *

NEW (2019) *

(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)?

To what extent are the proposed research methodology and working arrangements appropriate to achieve the goals of the project (based on the full Scientific Proposal)?

To what extent does the proposal involve the development of novel methodology (based on the full Scientific Proposal)?

To what extent are the proposed timescales and resources necessary and properly justified (based on the full Scientific Proposal)?

Intellectual capacity, creativity and commitment

Starting and Consolidator

Intellectual capacity and creativity

To what extent has the PI demonstrated the ability to propose and conduct ground-breaking research?

To what extent does the PI provide evidence of creative independent thinking?

NEW (2019)

To what extent does the PI have the required scientific expertise and capacity to successfully execute the project?

Advanced and Synergy

Intellectual capacity and creativity

To what extent has/have the PI(s) demonstrated the ability to propose and conduct groundbreaking research?

NEW (2019) To what extent does/do the PI(s) have the required scientific expertise and capacity to successfully execute the project?

To what extent has the PI demonstrated sound leadership in the training and advancement of young scientists (for Advanced Grant applicants)?

Advanced and Synergy

Intellectual capacity and creativity

To what extent has/have the PI(s) demonstrated the ability to propose and conduct groundbreaking research?

To what extent does/do the PI(s) provide evidence of creative independent thinking?

To what extent have the achievements of the PI(s) typically gone beyond the state of the art?

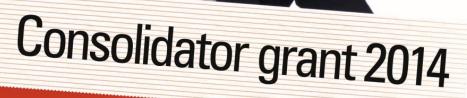
To what extent has the PI demonstrated sound leadership in the training and advancement of young scientists (for Advanced Grant applicants)?

Commitment

To what extent does the PI demonstrate the level of commitment to the project necessary for its execution and the willingness to devote a significant amount of time to the project (minimum 30% for Advanced and Synergy of the total working time) (based on the full Scientific Proposal)?

Personal views on how to develop an ERC proposal





Focus on the three whys

<u>TIP</u>: Be really explicit:

- Why you?
- Why this research program?
- Why now?

In my experience:

- I made a sketch of what "skills" I had from my previous jobs and research projects that were relevant to my ERC proposal and in which way they were necessary for the project

Ensure that in the description of the state-of-the-art/background leading to what you propose, your contributions in those fields are properly highlighted
Build the state-of the-art background in such a way that it is "obvious" that what

- Build the state-of the-art background in such a way that it is "ob you propose should be done now..... and by you!

Spell out all the important points

<u>TIP</u>: Do not overrate the reviewers. <u>Highlight</u> (without being too blunt):

- What are the innovative points of the proposal
- What can lead to a <u>breakthrough</u> or a huge step forward in the field
- What are the main challenges and risky points
- <u>Contingency</u> plan per point

In my experience:

- Add a separate point for "Innovations/ breakthroughs"
- Write a clear paragraph about what this research will enable
- In each work-package, highlight the challenges and explain how to deal with them

- Check which questions the reviewers get and answer them clearly so the reviewers are easily "guided" to the answers



to deal with them ly so the reviewers are

Part B1 – research proposal

TIP:

- Should be a mini-proposal, answering all the previous points (why you, why this proposal, why now)
- Highlight innovations/ breakthroughs/ challenges -
- Add sufficient technical detail! _
- Check who has been in your panel in the last few years so that you know who you are talking to in this B1 part

Part B1 – CV and Track Record

TIP: spend enough time thinking about this part!

- Always highlight the positive
- Think ahead of the pitfalls (or what the reviewers might see as pitfall) in your CV and be proactive
- Get feedback/help from your grants office

In my experience:

- *Time in industry with almost no publications*: highlight how I can convert ideas to innovations, how I was given the responsibility of leading large industrial projects.....
- I explained the *typical impact factor* of the journals recognized in my field
- Since I was not yet "consolidated", show the growing potential of my CV

Part B2 – the full proposal

TIP:

- Sufficient technical details \rightarrow show clearly the methodology -
- If background details are necessary, consider adding them into a Box to avoid disturbing the reading flow
- Self-standing

Take care of details and <u>style</u>...

- Enthusiastic
- Positive
- Precise: every sentence should serve a purpose
- Clean, polished, no typos/mistakes
- Nice pictures
- Logical structure to help highlighting the important points
- Not overfull
- Make reading your proposal a nice (and easy) experience for the reviewers! -

... and get feedback!

- During the building of the idea, discuss with colleagues to ensure that you are in the right path
- Get several colleagues from which you expect honest feedback to read the proposal
- Be very critical with the feedback that you get \rightarrow at the end of the day it is your proposal
- Use negative feedback in a positive way \rightarrow the reviewers could have the same thoughts so you'd better answer to them already in the proposal
- Try to get one or two successful proposals to get inspired



• discuss • application plans and requirements

- define plans for proposal preparation •
- gather info & materials pitch of initial ideas benchmark CV

2.

PREPARE

identify evaluation panel

Faculty/ peers

Grant support Office

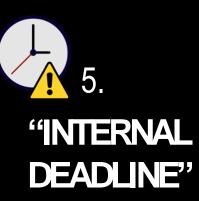
PITCH TO PEERS

3.

- pitching of ERC idea to colleagues/ supervisors – identify "ERC peer tutors"
- DRAFTS • get draft

4.

- checked, with feedback on "ERC tone"
- get feedback from ERC peer tutors
- budget check
- ethics?
- ORCID?
- "extras": illustrations? website? science editor?...



proposal draft one month before deadline

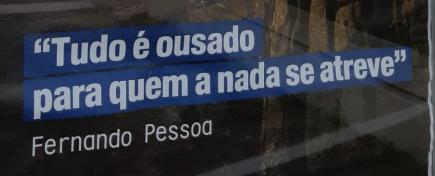
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- last feedback round, also from peers
- final support on "extras" (science editor services?)

6.

ADMIN

- Participant Portal
- host support letter
- submission



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Signs around you call for action! Dare to try.... ... and make a plan and gather what it takes to make it happen! ③