The European Research Council



European Research Council

Established by the European Commission

An introduction to the ERC

Pascal.ANASTASOPOULOS@ec.europa.eu ERCEA.B.4 - Physical Sciences and Engineering

EPS – HEP2025

2025 European Physical Society Conference on HEP Marseille, France



Table of content

- The ERC basics
- The Application process
 - > Preparing the proposal
 - > The various steps
- Epilogue







The Basics

European Research Council Established by the European Commission



ERC is part of Horizon Europe





EUR 16 billion ERC budget in Horizon Europe



of the entire Horizon Europe budget



What does the ERC do?

Funds frontier research







Scientific governance

- Independent Scientific Council with 22 members, with full authority over strategy.
- Supported by a Dedicated Implementation Structure, the ERC Executive Agency.

Scientific freedom

- Scientific excellence as the sole criterion.
- Support to the individual scientist no consortia!
- No predetermined subjects "bottom-up".
- Support for frontier research in all fields of science and humanities.
- International peer-review.



Evaluation



Excellence

is the sole evaluation criterion



Evaluation



Excellence is the sole evaluation criterion

Excellence of the Research Project

- Groundbreaking nature
- Potential scientific impact
- Scientific Approach

Excellence of the Principal Investigator

- Intellectual capacity
- Creativity
- Commitment



An ERC motto engraved in marble



ERCEA MMXII D.C.





ERC budget 2007 – 2027: € 36.5 billion



ERC grant schemes

W

European Commission

European Research Council

Established by the European Cammission

StG	Starting Grant (StG)	2–7 years after PhD	up to €1.5M	up to 5 years
CoG	Consolidator Grant (CoG)	7–12 years after PhD	up to €2M	up to 5 years
AdG	Advanced Grant (AdG)	Established track record	up to €2.5M	up to 5 years
SyG	Synergy Grant (SyG)	2–4 PIs with complementary expertise	up to €10M	up to 6 years
?	New Grant		up to €12M	up to 7 years
erc	Proof of Concept (PoC)	For ERC grantees only	€150K	18 months

ERC grant schemes (from 2027)

European Research Council

Established by the European Cammission

European

StG	Starting Grant (StG)	0–10 years after PhD	up to €1.5M	up to 5 years
CoC	Consolidator Grant (CoG)	<mark>5–15</mark> years after PhD	up to €2M	up to 5 years
AdG	Advanced Grant (AdG)	Established track record	up to €2.5M	up to 5 years
SyG	Synergy Grant (SyG)	2–4 PIs with complementary expertise	up to €10M	up to 6 years
?	New Grant		up to €12M	up to 7 years
erc	Proof of Concept (PoC)	For ERC grantees only	€150K	18 months

For the fields - 28 panels

Life Sciences

- LS1 Molecules of Life: Biological Mech, Structures and Functions
- LS2 Integrative Biology: From Genes and Genomes to Systems
- LS3 Cell Biology, Development, Stem Cells and Regeneration
- LS4 Physiology in Health, Disease and Ageing
- LS5 Neuroscience and Disorders of the Nervous System
- LS6 Immunity, Infection and Immunotherapy
- LS7 Prevention, Diagnosis and Treatment of Human Diseases
- LS8 Environmental Biology, Ecology and Evolution
- LS9 Biotechnology and Biosystems Engineering

Physical Sciences & Engineering

- PE1 Mathematics
- PE2 Fundamental Constituents of Matter
- PE3 Condensed Matter Physics
- PE4 Physical and Analytical Chemical Sciences
- PE5 Synthetic Chemistry and Materials
- PE6 Computer Science and Informatics
- PE7 Systems and Communication Engineering
- PE8 Products and Processes Engineering
- PE9 Universe Sciences
- PE10 Earth System Science
- PE11 Materials Engineering

Social Sciences and Humanities

- SH1 Individuals, Markets and Organisations
- SH2 Institutions, Governance and Legal Systems
- SH3 The Social World and Its Interactions
- SH4 The Human Mind and Its Complexity
- SH5 Texts and Concepts
- SH6 The Study of the Human Past
- SH7 Human Mobility, Environment, and Space
- SH8 Studies of Cultures and Arts



The ERC Scientific Council



The governing body of the ERC

- Sets the funding strategy
- Determines the different calls
- Sets the evaluation criteria

Appoints members to the 28 evaluation panels





The 28 Evaluation Panels



Panels evaluate the proposals

- Each has 16-18 scientists.
- Balanced across disciplines and countries.
 - > 1-2 members will be close to your field.
 - > the rest act as "generalists".
- They are renewed regularly.



The 28 Evaluation Panels



Panels evaluate the proposals

- Each has 16-18 scientists.
- Balanced across disciplines and countries.
 - > 1-2 members will be close to your field.
 - the rest act as "generalists".
- They are renewed regularly.

Remember this!





Application process

European Research Council Established by the European Commission



Why to apply for an ERC grant?

ERC offers independence, recognition & visibility

- Research topic of own choice, with a team of own choice
- True financial autonomy for 5 years
- Negotiate with the host institution the best conditions of work
- Attract top team members (EU and non-EU) and collaborators
- Portability of grants within Europe
- Attract additional funding

Synergy: 2-4 principal investigators

Synergy: 6 years

Synergy: 1 PI anywhere in the world



Anyone from anywhere in the world can apply

Opportunities for researchers outside European Union / Associated Countries:

- Additional "start-up" funding for researchers moving to Europe.
 (€ 1 million for StG, CoG and AdG, expected to be doubled)
- Grantees can keep affiliation with home institute outside Europe. ("significant part" of work time in Europe: at least 50%)
- Team members and partner organisations can also be based outside Europe.
- Grantees can move within Europe with the grant.



Some rumours

Rumour 1: You can only apply for an ERC grant if you are a highly accomplished scientist.

X NOT true: Accomplishments are appreciated in relation to your stage/seniority as giving some evidence of your capacity to conduct the research you propose and of creativity within the past 10-12 years of your career.

Rumour 2: To be successful, you need to continue on an established research line, to prove continuity and credibility X NOT true: Generally, the opposite is true.

Rumour 3: If you have already obtained an ERC grant you are less/more likely to get another one.

X NOT true: Panels look at each proposal on its own merit and in comparison with the other applications, irrespectively of whether you have or have not obtained an ERC grant in the past.

Rumour 4: The more socially or medically relevant a grant proposal is, the higher the chances of it getting funded.

X NOT true: ERC funds frontier research, not research that promises to be only an incremental advancement of knowledge. This is irrespective of the field and whether it has societal, medical or clinical applications.



Therefore...

- Do you have an original idea, curiosity driven?
- Are you ready to lead your own research team?

APPLY!





Prepare your proposal – step by step

European Research Council Established by the European Commission



Step 1: Choose your panel wisely

- The review panel is decided by the PI
- There is the possibility of a second review panel
- Transfers of the proposals may occur
- Do not apply for a panel that funds more grants. The success rate is the same among all panels.



Step 2: Write the proposal

- Try to stress the following:
 - > Is it really an innovative idea?
 - > Does it go beyond the state of the art?
 - > Does it have the potential to open new ways and new ground?
 - > Argue why to expect success, despite the risks?
 - > Is it feasible with the expected means and the time available?
- You have to
 - > excite at least one panel member to be a champion fighting for your proposal.



convince the world experts in the area.

• Part A

- General Information (Host Institute, the PI, Ethics etc)
- Part B1: Scientific Information
 - Abstract and Cross-Panel Explanation
 - Scientific Synopsis
 - > CV & Track Record
- Part B2: Full Scientific Proposal
 - > Detailed scientific project, objectives, methodology, work plan, resources.
 - Risk assessment and contingency plans
 - Justification of the budget
- Annexes





- Part A
 - General Information (I)
- Part B1: Scientific Information
 - Abstract and Cross-Panel
 - Scientific Synopsis
 - > CV & Track Record
- Part B2: Full Scientific Propos
 - Detailed scientific projection
 - Risk assessment and co
 - Justification of the budger

Annexes

Your CV

- should prove that the PI is **able to achieve** the goals of the proposal.
- Indexes (h-factor) and publications on high impact journals are not criteria.
- Publishing with senior scientists (former advisors) might raise doubts about maturity independence.





- Part A
 - General Information (I)
- Part B1: Scientific Information
 - Abstract and Cross-Panel
 - Scientific Synopsis
 - CV & Track Record
- Part B2: Full Scientific Propos
 - Detailed scientific projection
 - Risk assessment and co
 - Justification of the budge
- Annexes

Your CV - hints

- Explain what has been your own contribution to your publications/how they have impacted the field.
- Explain publishing habits in your field and country if needed.
- Describe accurately any other activity that can indicate scientific maturity.
- If you know that you have gaps or other issues in your CV, explain them in the Additional Information section.



- Part A
 - General Information (I)
- Part B1: Scientific Information
 - Abstract and Cross-Pane
 - Scientific Synopsis
 - > CV & Track Record
- Part B2: Full Scientific Propos
 - Detailed scientific project
 - Risk assessment and co
 - Justification of the budget
- Annexes

erc

B1: Scientific Synopsis

- will determine weather you will pass to Step 2!
- avoid jargon/no excessive highlighting/sloppy manuscript
- do not oversell it
- make it as accessible as possible to a generalist (have it proof-read by many people)

- Part A
 - General Information (I)
- Part B1: Scientific Information
 - Abstract and Cross-Pane
 - Scientific Synopsis
 - > CV & Track Record
- Part B2: Full Scientific Propos
 - Detailed scientific projection
 - Risk assessment and co
 - Justification of the budge

Annexes

B2: The Full Proposa

- Clear link B1 and B2 avoid repetitions
- Provide detailed description of
 - methodology
 - 🖌 🛛 work plan
 - mitigation strategies
- Clearly highlight **quantitative and qualitative advancements** beyond the state of the art, with proper references.

European Research Council

erc

• Part A

- General Information (I)
- Part B1: Scientific Information
 - Abstract and Cross-Pane
 - Scientific Synopsis
 - > CV & Track Record
- Part B2: Full Scientific Propos
 - Detailed scientific project
 - Risk assessment and co
 - > Justification of the budge
- Annexes

B2: The Budget

- Give indicative Budget analysis.
- Resources requested should be reasonable and well justified.
- Costs can be cut by the panel when they have not been explained.
- Panels do not "micro-manage" project finances.
- Awards made on a "take-it-or-leave-it" basis: no negotiations.
- Ask for funding for Open Access this is obligatory in Horizon Europe





The Evaluation – step by step

European Research Council Established by the European Commission



STEP 1

STEP 2



STEP 1

STEP 2

Remote assessment by Panel members see ONLY section 1: Synopsis and CV (Part B1)











120

ranked

2








The evaluation process has two steps





The evaluation process has two steps





The evaluation process has two steps







European Research Council







Some hints: How to prepare for the interview

- Have clear and representative slides and focus on SCIENCE!
- Don't try to make a business presentation you are talking to scientists.
- Keep the time
- Try to anticipate questions. Prepare also for cases where you do not have an answer
- Give to the point answers be mindful not to talk too much in an unfocussed way
- Know the details of your proposal and methods, as well as your research area who are your main

competitors/collaborators?

If you have new work on the topic – present it!



Some hints: Typical reasons for rejection

Research Project

- Scope: Too narrow ←→ too broad/unfocussed
- Not clear groundbreaking aspects/Incremental research
- Work plan not detailed enough/unclear
- Insufficient risk management
- No sufficient information on the methodology concerns on feasibility
- Principle Investigator
 - Insufficient track-record
 - Not clear they can carry out the project (not independent, lack of relevant expertise)



Some hints: Typical reasons for rejection

- Research Project
 - Scope: Too narrow ←→ too broad/unf
 - Not clear groundbreaking aspects/Increi
 - Work plan not detailed enough/unclear
 - Insufficient risk management

If rejected, **KEEP TRYING** Resubmissions have high success rate! Use the feedback from reports

- No sufficient information on the methodology concerns on feasibility
- Principle Investigator
 - Insufficient track-record
 - Not clear they can carry out the project (not independent, lack of relevant expertise)







European Research Council Established by the European Commission



Provisional Call Calendar – Work Programmes 2025 & 2026

Work Programme	Call	Deadline
2025	Advanced Grant	28 August 2025
2025	Proof of concept	18 September 2025
2026	Starting Grant	Expected in October 2025
2026	Synergy Grant	Expected in November 2025
2026	Consolidator Grant	Expected in January 2026
2026	Advanced Grant	Expected in August 2026
2026	Proof of concept	Expected in March + September 2026



See Funding and Tender portal for up-to-date information

https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/home

Increased international participation in StG & CoG





Proportion of evaluated proposals from non-EU/Associated Country nationals by call year

ERC in figures



Over **14,000** top researchers funded since the ERC creation in 2007



Over **220,000**

articles from ERC projects published in scientific journals



Over **100,000** researchers and other professionals employed in ERC research teams



Over **950** research institutions hosting ERC grantees – universities, public or private research centres in the EU or Associated Countries



Over **2,400** patents and other IPR applications generated by ERC funding

start-ups identified as founded

or co-founded by ERC grantees

Over **400**



93 nationalities of grant holders



14 Nobel Prizes, **6** Fields Medals, **11** Wolf Prizes and other prizes awarded to ERC grantees



Where Can You Find More Information?



Videos - ERC Classes

- What to consider before applying
- How to fill in the application (Part I and II)
- The interview
- How the evaluation works

https://www.youtube.com/watch?v=xbFbz kVWgCU&list=PLtv6FnsXqnXAYRk6HCErw MxwML0ZKoMcy



Thank You!

More information:

https://erc.europa.eu/

Funding & Tender Opportunities:

https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/home



