The European Research Council

ERC Synergy Grant 2024

Dr. Giuliano Scalzi Synergy grants call co-coordinator ERC.B.2 - Call and Project Follow-up Coordination Unit

4-07-2023, Spain Information event





Overview

About the ERC and its funding schemes

Prospects for Work Porgramme 2024

ERC Synergy grant features & proposal structure

Spain's participation in ERC calls, including Synergy 2022

Evaluation criteria, process and timeline

Hints and tips





About the ERC

ERC is part of Horizon Europe – The EU research and Innovation Programme 2021-2027

Scientific governance

- Independent Scientific Council with 22 members including the ERC President, 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

Budget

- EUR 16 billion in Horizon Europe (17% of entire budget)
- Approx. EUR 2,2 billion to spend on calls under Work Programme 2024





ERC Grant Schemes

Starting Grants

2-7 years after PhD up to € 1.5 + 1 Mio for 5 years 50%

Consolidator Grants

7-12 years after PhD
up to € 2 + 1 Mio
for 5 years
40%
50%

Advanced Grants

track-record of significant research achievements up to € 2.5 + 1 Mio for 5 years



50%

Synergy Grants



2 – 4 Principal Investigators

any career stage

up to € 10.0 + 4 Mio for 6 years

1 PI can be based outside EU/Associated Country



50%, except

Proof-of-Concept

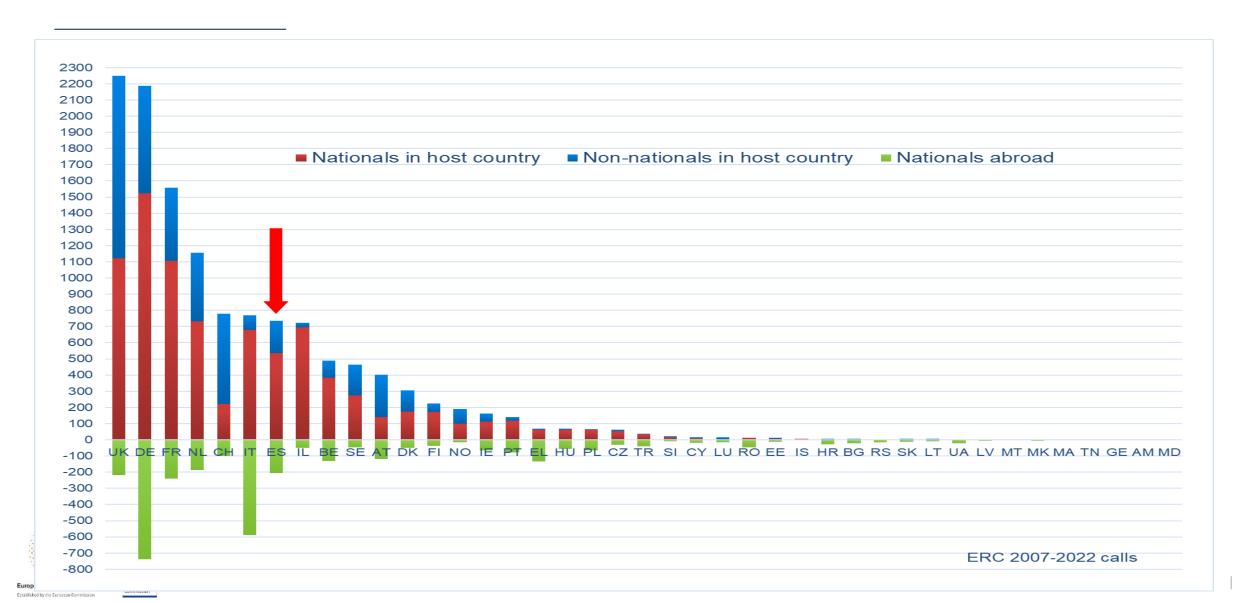
bridging gap between research - earliest stage of marketable or social innovation lump sum €150,000 for ERC grant holders



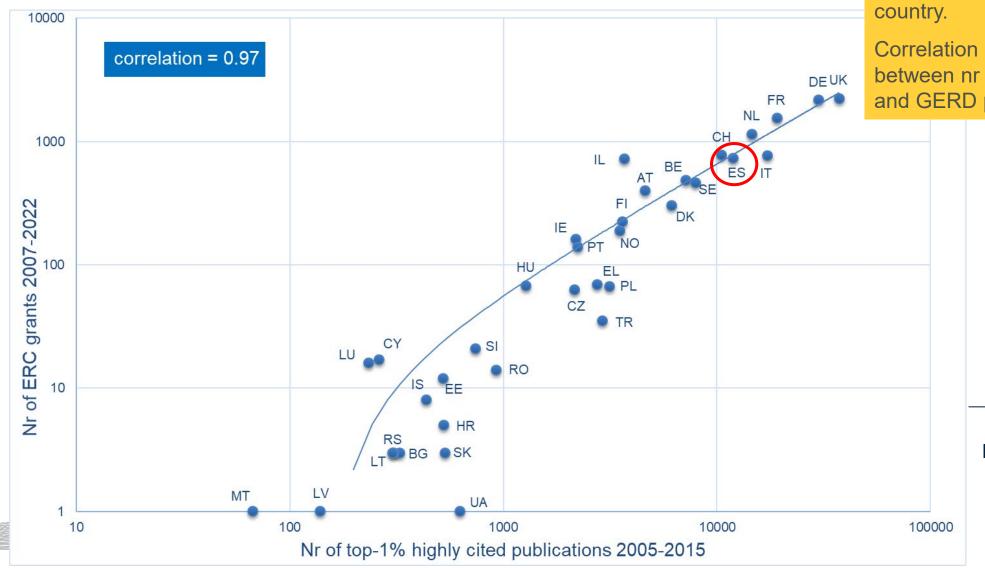
Success rate by country of Host Institution



Grantees at home and abroad



ERC grants versus top publications



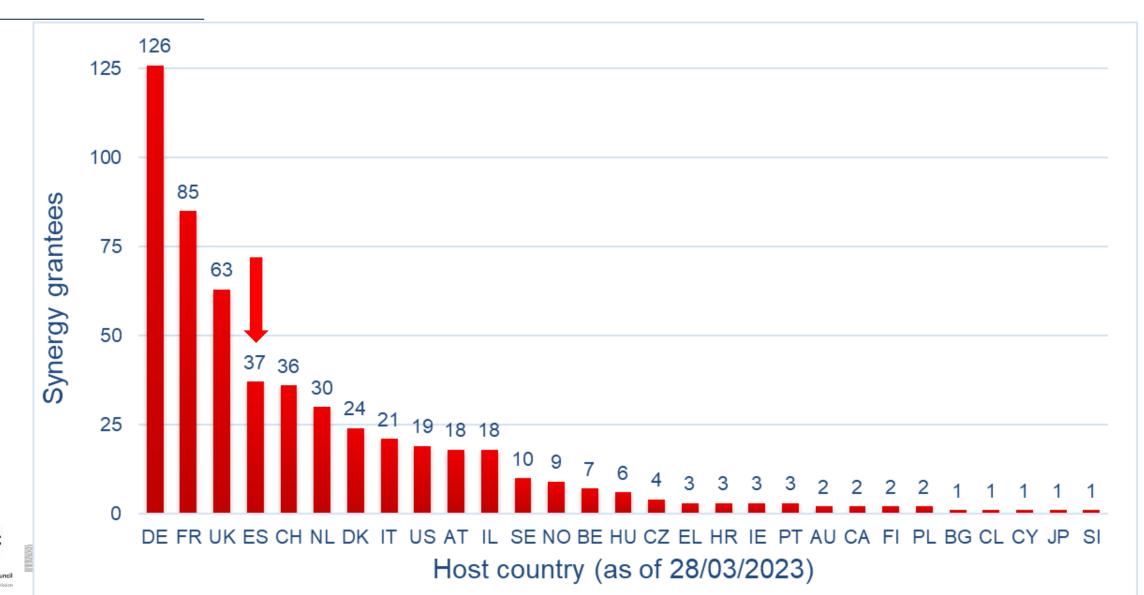
Correlation of **0.97** between nr of ERC grants and nr of top-1% highly cited publications per country.

Correlation of **0.85** between nr of ERC grants and GERD per country.

Linear fit

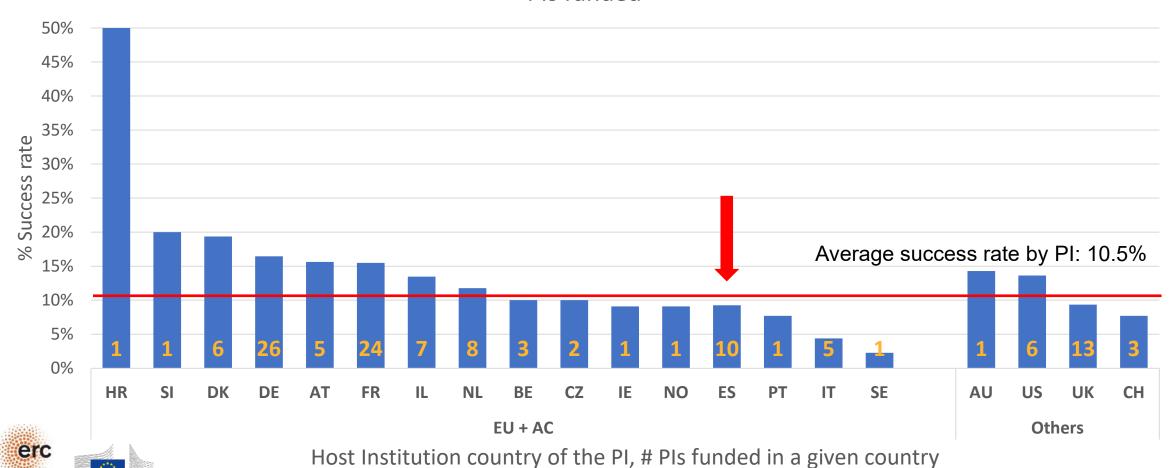
Host countries as of 28/03/2023

Synergy grantees



ERC Synergy 2022

SYG2022 Success rate considering the PIs by Host Institution country and number of PIs funded



2024 Tentative Call Calendar

Check final call calendar in the WP2024 as of mid-July 2023

		Starting Grant	Consolidator Grant	Advanced Grant	Synergy Grant	Proof of Concept Grant
	Call opens	11/07/2023	12/09/2023	29/05/2024	12/07/2023	16/11/2023
	Deadline to submit applications	24/10/2023	12/12/2023	29/08/2024	08/11/2023	14/03/2024 17/09/2024
and	Budget	€601m	€584m	€578m	€400m	€30m

Evaluation panel structure for individual grants

For calls under Work Programme 2024

Life Sciences

- LS1 Molecules of Life: Biological Mechanisms, 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





Changes compared to WP2023 are highlighted

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 (NEW)

Exact details to be checked in WP2024

ERC & Research Assessment

How will the ERC take on board Coalition on Research Assessment agreement?

- Proposals continue to be evaluated by peer review panels composed of leading scientists and scholars using sole criterion of scientific excellence
- CV & Track Record templates will be combined + simplified
- Applicants will be able to add short narrative descriptions to explain information provided
- Applicants are invited to explain career breaks or unconventional career paths & to describe exceptional contributions to research community
- Explicitly weighing project proposal more than past achievements of applicant during evaluation
- Evaluation of ERC grant proposals: what to expect in 2024 | ERC (europa.eu) (April 2023)
- Scientific Council statement on research assessment [1]

[1] <u>https://erc.europa.eu/news-events/news/erc-scientific-council-decides-changes-evaluation-forms-and-processes-2024-calls</u> (Dec. 2022)





Design of the Synergy call 2024

check details mid-July 2023, when the Work Programme 2024 is adopted

Call budget to be confirmed for WP2024

SyG-2024

Call budget: 400 M€

~40 grants to be funded

Grant size: up to 10M€ + 4M€ for 6 years SyG2024 call opens for submission on 12/07/2023

Host Institutions in EU or AC, with the possibility of having one HI outside

2-3-4 Principal Investigators (PIs) No restrictions on their location at the time of application

SyG2024: call closes on 8/11/2023

This does not apply to the PI applying with a Host Institution outside of EU or AC

≥50% of working time in EU or AC ≥30% of working time on the ERC project

Pls can be in the same or different institutions

3-step evaluation: with interviews with all Pls in step 3





ERC Synergy Grant features

Joint effort

Breakthroughs not possible by individual Pls working alone

Strong commitment

A PI is expected to remain part of the group for the whole grant

Ambitious research problem

Synergy

Know-how of the group + Combination of scientific

approaches

Equality among PIs

With a designated corresponding PI

Pls of any career stage

Pls choose the type of track record (StG/CoG/AdG)





ERC Synergy Grant features Synergy aspects

SYNERGY

A major scientific question with a transformative scientific potential that could not be addressed by an individual PI and their team working alone

Involves teams with exceptional combinations of knowledge and skills with the PIs holding a central role

Pls must demonstrate that their group can successfully bring together the scientific elements necessary to address the scope and complexity of the proposed research question.





ERC Synergy Grant features

Synergy aspects

NOT SYNERGY

Loose cooperation or networking between Pls

Simple passing of data or information from one team to another

Note: The proposed work does not need to cover more than one discipline or field to be considered for the Synergy grants



ERC Synergy - Proposal Structure In step 1 only part B1 is reviewed.

Administrative data and eligibility are checked by ERC staff.

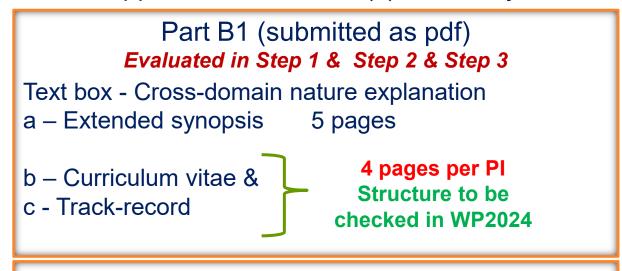
Note! Each Host Institution has to submit their support letter for the PI(s) hosted by them.

Administrative forms (Part A)

- 1 General information
- 2 Administrative data of organisations
- 3 Budget
- 4 Ethics
- 5 Call specific questions
- 4-6 ERC keywords are selected, panels are not defined at submission

Annexes

Commitment of all the Host Institutions, ethics docs, etc.



Part B2 (submitted as pdf)

NOT evaluated in Step 1 (only in Step 2 & 3)

Scientific proposal 15 pages

- a State-of-the-art and objectives
- b Methodology
- c Resources (budget breakdown per PI + a joint one)





Indicative submission restrictions for the SyG2024 call

When checking for a rule look for the call year, not calendar year.

Evalua	tion	Can a PI apply to			
Result of SyG 2022 or 2023	Step	StG/CoG call in 2024?	AdG call in 2024?	SyG call in 2024?	
С	1	yes	yes	no	
В	1	yes	yes	yes	
В	2	yes	yes	yes	
A or B	3	yes	yes	yes	

Applicants to previous StG/CoG/AdG ERC calls can apply to the SyG2024 call regardless of the score received previously.

To be eligible for SyG2024: a running ERC grant has to end before 8 November 2025

A PI can be part of only one application published under the <u>same</u> Work Programme regardless of the call. The first application will be considered, the subsequent ones will be declared ineligible.



Evaluation

Excellence is the sole evaluation criterion; focus on the project

Be familiar with the evaluation question in the Work Programme or in the Information for applicants to the Synergy grants call.

1. EXCELLENCE OF THE RESEARCH PROJECT

- Ground breaking nature
- Potential impact
- Scientific approach
- Synergetic aspects
- In step 1 the feasibility is assessed only => methodology in step 2 and 3
 (in part B2)
- Resources are not assessed in step 1

2. EXCELLENCE OF THE PRINCIPAL INVESTIGATORS

- Each PI assessed according to their career benchmarks
- Intellectual capacity
- Creativity
- Commitment => evaluated in step 2 and 3 only (information in part B2)



ERC SyG 2024 Evaluation Process

Indicative dates to be published in the fall of 2023

interdisciplinary panels: 2 Life sciences, 2 Physical sciences and Engineering,1 Social science and humanities oriented; defined only when we know what type of proposals remain in evaluation after step 1

Step 1: 1 panel

REMOTE REVIEWS:

- Only part B1
 - Mainly generalists:
 panel members
 panel evaluators*

End of February 2023

Meeting: panel chairs & vice chairs → scoring:

- A (max 7 x budget)
- ~ 230 proposals
- > A uninvited
- B rejected
- C** rejected

Step 2: 5 panels

REMOTE REVIEWS:

- Parts B1 & B2
 - Mainly generalists:
 panel members
 - Specialists: remote referees

End of June 2024

Meeting: panel members → scoring:

- ➤ A (max 4 x budget)
- ~ 120 proposals
- ▶B rejected

Step 3: 5 panels

NO REMOTE REVIEWS

- Parts B1 & B2
 - Panel members: interview preparation: formulate questions based on step 2 reviews

Early September 2024

Meeting: panel members; interviews with all PIs → scoring & ranking:

- ➤ Top A main list ~ 40 funded
- ➤ A below funding limit reserve + rejected
- ➤B rejected

*panel evaluators (PEVs) are panel members of other ERC calls assisting in the remote review phase by providing individual reviews

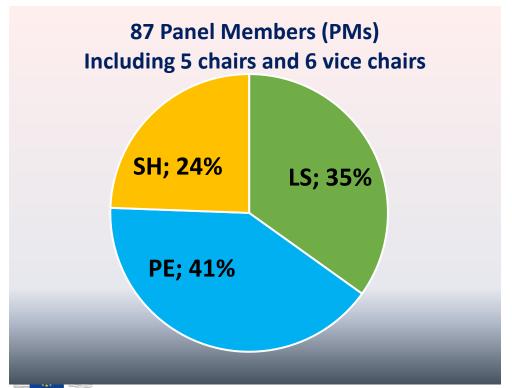
** might be restricted from applying to the next ERC SyG call.

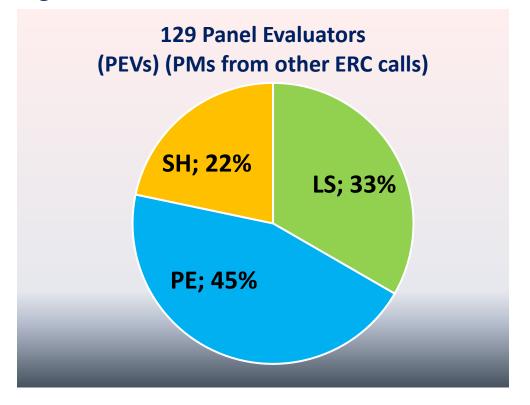
SyG 2022 - Evaluators' profile

Step 1: Remote Evaluation

215 Reviewers; 39 Nationalities; 138 Men and 77 Women (36%)

Scientific background

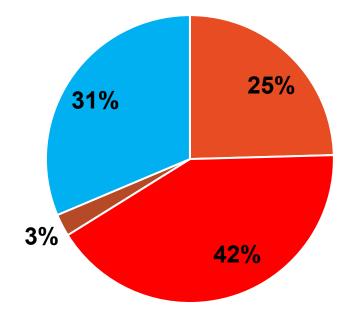






ERC SyG2022 Data on step 2 panels Overview reviewers: Number and type of reviewers in step 2

- Panel members in step 2: 87 in 5 panels
- Remote referees: 4344 invited 1362 reviews submitted
- Each proposal has between 7 and 17 reviews:
 - Panel members between 4 to 6 reviews per proposal
 - Remote referees and panel evaluators: between 3 to 12 reviews
 - Not Replied
 - declined
 - accepted but not delivered
 - review delivered



2132 Reviews submitted for 210 proposal





Hints and tips Preparing an application Differences in Part B1 and Part B2

In **Step 1**: **Panel members** (**act as generalists**) they see **only Part B1** of your proposal: Prepare it accordingly, make sure it is accessible to non-specialists!

- Pay particular attention to the ground-breaking nature of the research project no incremental research. State-of-the-art is not enough. Think big!
- For SyG: Synergetic aspects important know-how of the group is assessed together with the combination of the scientific elements
- Know your competitors what is the state of play and why is your idea and scientific approach outstanding?
- Only the extended Synopsis is read at Step 1: concise and clear presentation is crucial (Outline only of the methodological approach – feasibility is assessed at step 1)



Hints and tips Preparing an application Differences in Part B1 and Part B2

In Step 2: Both Part B1 and B2 are sent to specialists around the world (specialised external referees)

- Do not just repeat the synopsis in part B2
- Provide sufficient detail on methodology, work plan, selection of case studies etc. (15 pages) (references do not count towards page limit)
- Check coherency of figures, justify requested resources (outside of 15 pages)
 pay attention to the calculations and provide budget for each of the PIs
- Explain involvement of additional team members (it is possible to have further beneficiaries/partners in the project)
- Funding ID to be filled in carefully for each PI

In Step 3: no new reviews are written, but part B1 and B2 are re-assessed



Hints and tips

Summing-up

- Have an original and exciting idea that requires the joint effort of 2 or 3 or 4 PIs
- Design a research project to implement the idea
 - It is not about a consortium, but about a tight-knit small group of PIs and their teams. The PIs are equal and indispensable for the project!
- Get a letter of support for each PI from their Host Institution
- If you have submitted previously to ERC Synergy grants check the resubmission restrictions before applying
- Write the research proposal (carefully plan the resources). Choose carefully the 4-6 keywords and abstract: applications are not submitted to panels used in the individual grants
- Read carefully the evaluation criteria and try to ensure that the reviewers can find the answers to them in your proposal (part B2 is not a mere repetition of part B1)
- Get feedback from your peers
- Don't underestimate the obstacle of different scientific languages when you are merging fields
- Submit your research proposal before the deadline -> fully electronic/web-based submission system - try to avoid submitting on the last day

Take home messages – ERC Synergy grants

The end result should be more than the mere sum of the parts.

Competitive call (expected success rate of 8,4% in SyG2023)

only exceptional proposals are likely to be funded that will demonstrate that the truly ambitious research questions could lead to breakthroughs only through the joint effort of the group of Pls.

'Synergy' does not mean a loose consortium and is not the end goal

- → The interaction would yield something more than just the sum of the individual parts.
- To yield possibly either unforeseen, completely new science, to cross fertilize disciplines or to solve important research problems that until now could not be dreamt of solving.

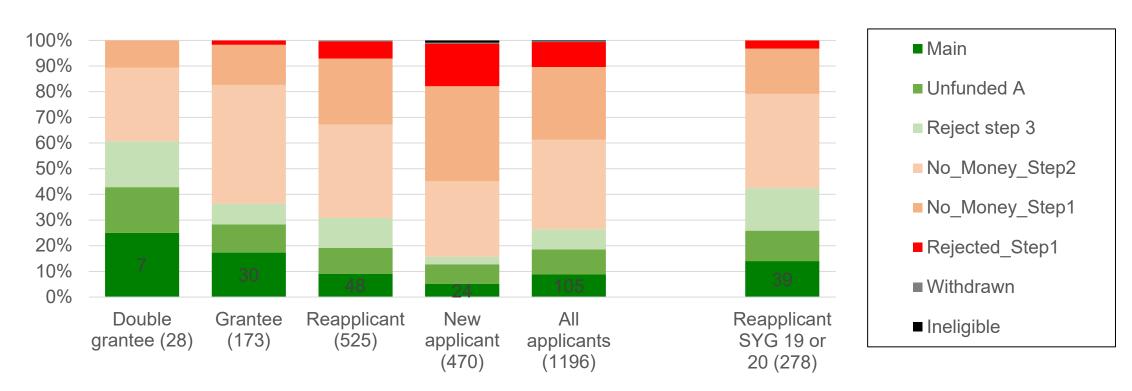
Early career applicants are encouraged to apply



SyG2022 Results depending on the type of applicant

Resubmissions are more successful than first time applications

SYG 2022 Results of evaluation by type of applicant







Further advice

- 1. Consult call documents (Work Programme, Information for Applicants, ERC classes)
- 2. Information and videos on Synergy grants on the ERC website: https://erc.europa.eu/apply-grant/synergy-grant
- Look at funded projects in your field (search tool on ERC website), testimonials, tutorials (<u>ERC</u> homepage)
- 4. Register early on the F&T Portal in the submission system
- 5. Have your documentation ready
- 6. Contact the ERCEA and ask all your questions well ahead of the submission deadline: SyG mailbox: ERC-SYG-APPLICANTS@ec.europa.eu)
- 7. Get the written consent of your collaborators before the submission deadline (a simple email exchange is OK)

Thank You!

ERC-SYG-APPLICANTS@ec.europa.eu giuliano.scalzi@ec.europa.eu

More information: erc.europa.eu



Follow us on social media











European-Research-Council European Research Council

European Research Council



