# The European Research Council

ERC calls under the Work Programme 2024 and insights into the Synergy grants call

Dr. Ágnes Kulcsár Synergy grants call coordinator ERC.B.2 - Call and Project Follow-up Coordination Unit

15-06-2023, Israel Information event





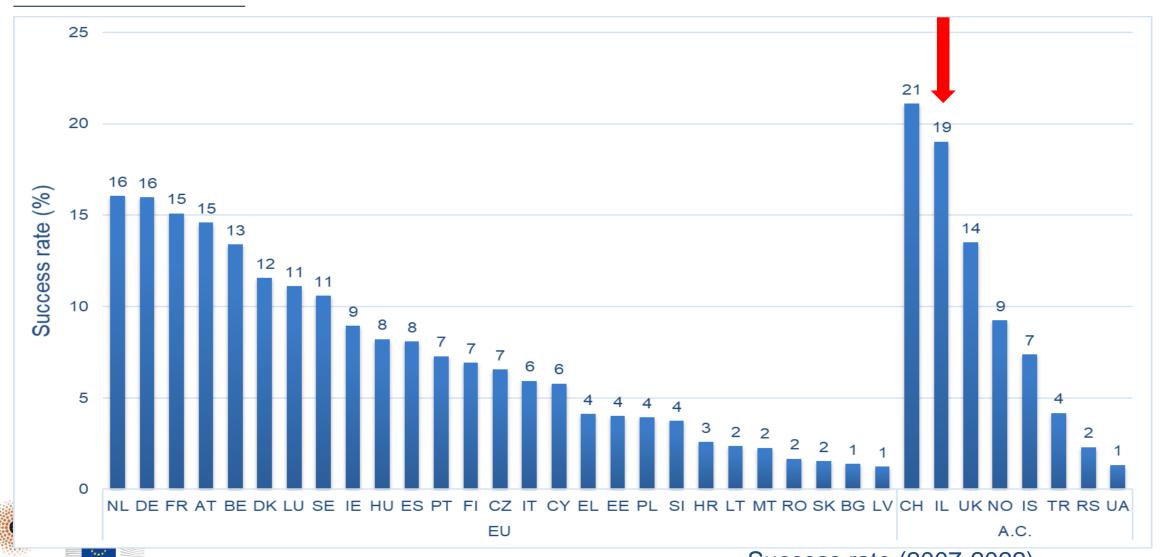
#### **Overview**

Israel's participation in ERC calls, including Synergy 2022 **ERC Synergy grant features & proposal structure Evaluation criteria, process and timeline** About the ERC and its funding schemes **Prospects for Work Porgramme 2024** Hints and tips

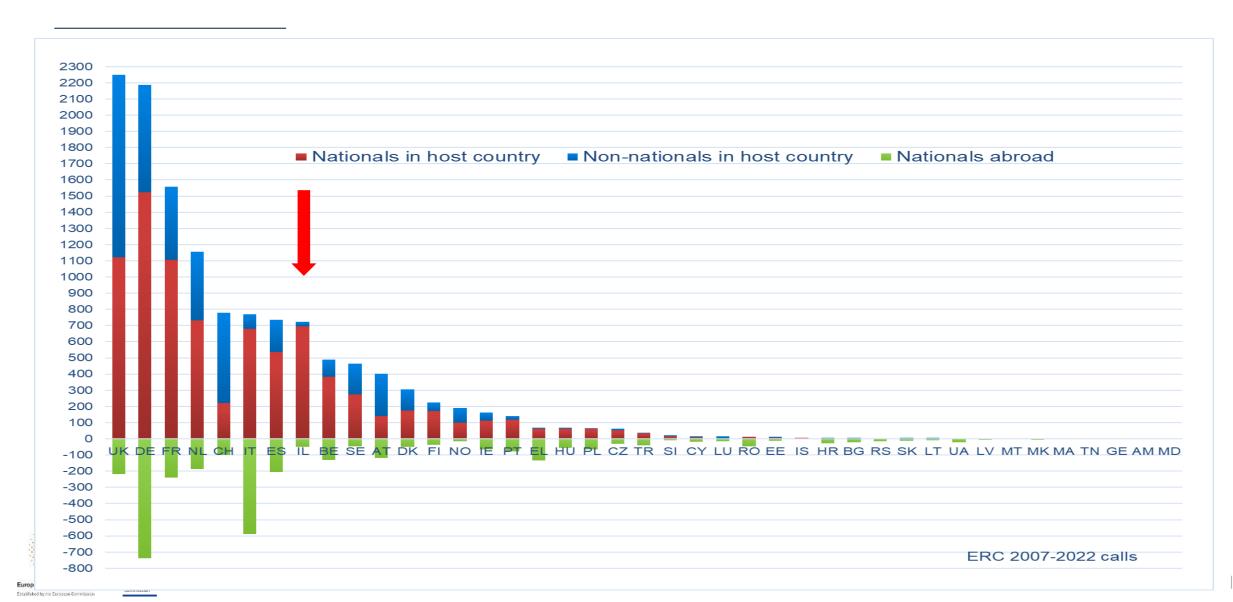




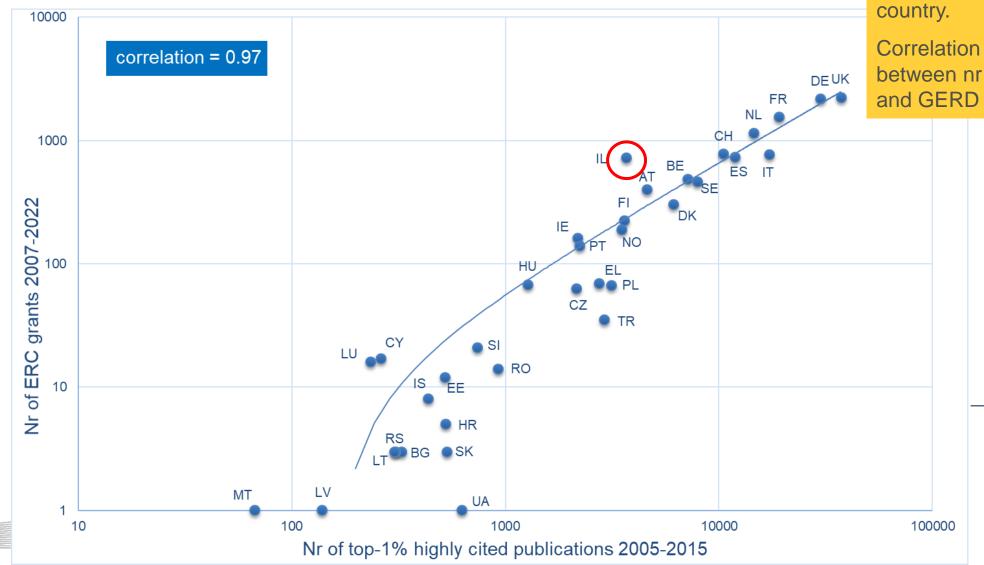
# Success rate by country of Host Institution



## Grantees at home and abroad



# ERC grants versus top publications



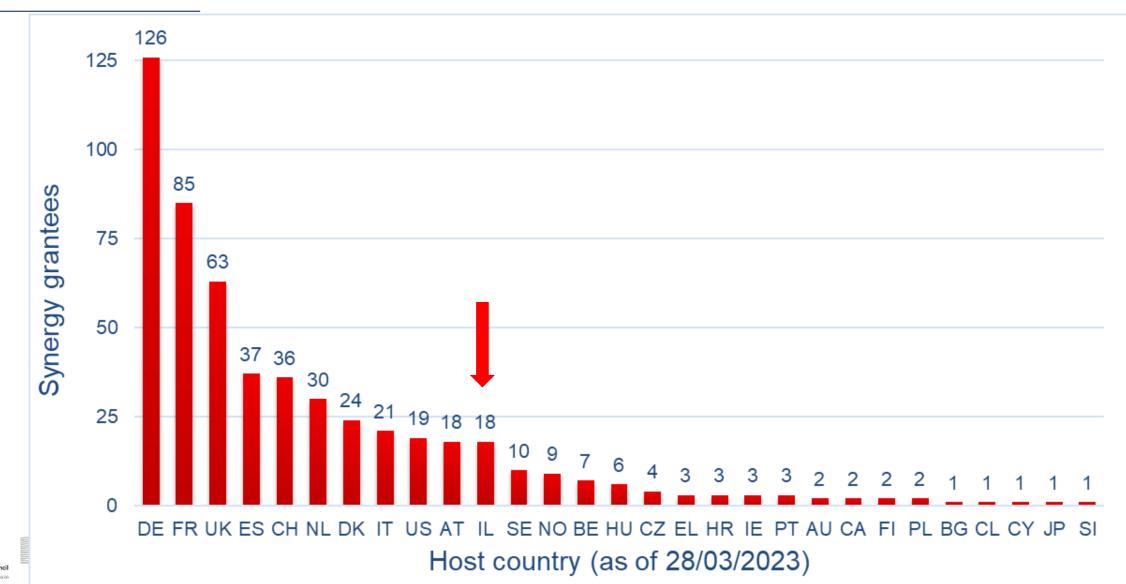
Correlation of **0.97** between nr of ERC grants and nr of top-1% highly cited publications per country.

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

Linear fit

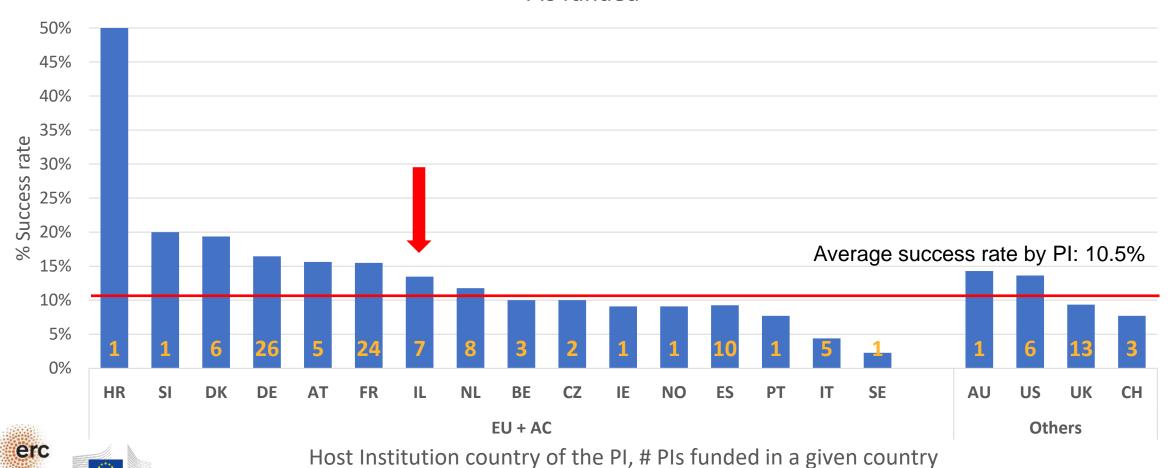
Host countries as of 28/03/2023

# Synergy grantees



# ERC Synergy 2022

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



Design of the Synergy call 2024

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

**SyG-2024 Grant size:** Call budget to be Call budget: up to 10M€ + confirmed for WP2024 400 M€ 4M€ for 6 ~40 grants to years be funded Host No 2-3-4 Institutions in restrictions on **Principal** EU or AC, with their location **Investigators** at the time of the possibility (PIs) of having one application HI outside ≥50% of working time Pls can be This does not apply

SyG2024 call opens for submission on 12/07/2023

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





# 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.

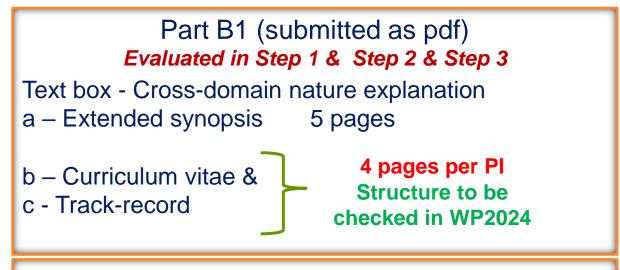
Note! Each Host Institution has to submit their support letter for the PI(s) hosted by them.

#### 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	ation	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, 2, 3	yes	yes	yes	
Α	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





# 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 Pls → 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.

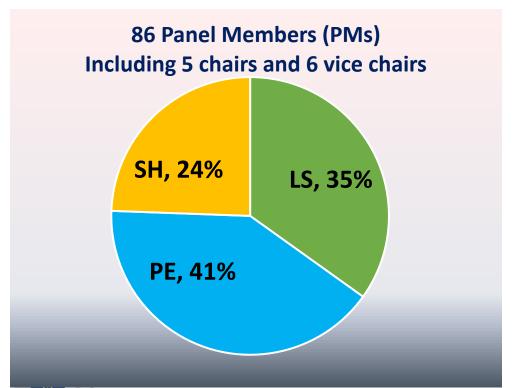
## SyG 2022 - Evaluators' profile

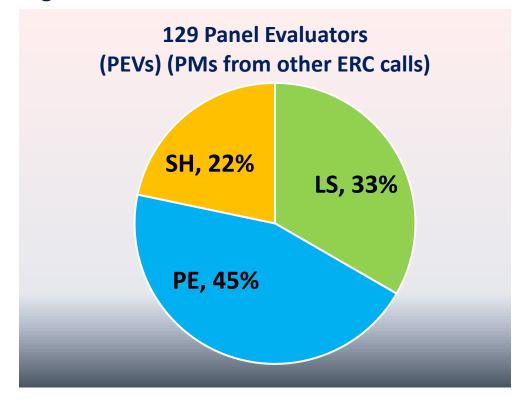
#### Step 1: Remote Evaluation

erc

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

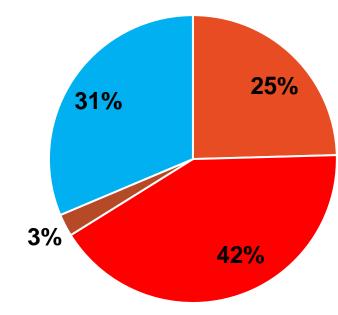
#### Scientific background





# 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





# 2<sup>nd</sup> part



#### **Overview**

About the ERC and its funding schemes **Prospects for Work Porgramme 2024** 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

#### **Consolidator Grants**

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

#### **Advanced Grants**

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



30%

50%





50%

#### **Synergy Grants**

50%

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



# Indicative timeline for Synergy grants under ERC Work Programme 2024 (WP2024)





## 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
100	Budget	€601m	€584m	€578m	€400m	€30m

## Preparing your proposal

## ...for Starting and Consolidator calls, make sure you are eligible!

- 1. Eligibility window is measured from the 1st of January of the year of the Call Extensions of eligibility window possible for documented cases
- 2. If you previously applied to an ERC call, check resubmission restrictions
- 3. Time commitment on the project: Min. 50% StG, 40% CoG, 30% AdG, 30% SyG
- 4. Minimum 50% of PI working time in an EU Member State or Associated Country For SyG: one PI can apply with a host institution outside of EU/AC: they do not need to comply with the min working time in the EU/AC SyG: no PhD related eligibility requirement





# Starting from WP2023: Change in PhD eligibility reference date

Check the rule in the WP2024 as of mid-July 2023

New "PhD eligibility reference date" rule:

The reference date towards the calculation of the eligibility period shall be the certified date of the successful defence.

- Allows for the eligibility window to reflect the *real academic age* instead of the "administrative age" of the PI
- Puts an end to confusion about "award according to national rules" brings clarity to applicants
- Most PhD certificates include the defence date
- If the PhD certificate does not show defence date, the candidate has to ask for written confirmation from the awarding institution





# StG and CoG: Extension of the Eligibility windows

For documented situations occurring before the call deadline

- Maternity leave: +18 months for each child born before/after the date of the successful defence of their PhD degree;
- Paternity leave: documented time taken for each child born before or after the date of the successful defence of PhD degree;
- Long-term illness (>90 days for the PI or a close family member) or national service: documented amount of leave taken for each incident that occurred after the date of the successful defence of PhD degree;
- Clinical training: documented amount of clinical training received after the reference date of the first eligible degree, up to a maximum of 4 years;
- Two new categories for extension: documented time of PI's inability to work due to natural disaster and for seeking asylum.



## Evaluation panel structure (2024) – relevant for StG/CoG/AdG calls

(SyG applicants choose only descriptors, not a panel)

Panel structure revised – 2024 ERC Panels and panel descriptors available on the ERC homepage:

- Provide guidance to applicants
- Not meant to be a complete scientific classification (not exhaustive)
- Panel titles, subtitles, descriptors do not reflect priorities
- Any topic/field is equally welcome, whether mentioned in panel structure or not
- The PI can flag one "Secondary Review Panel". If proposal is across panels: reviewers from both panels used. Explain why proposal is "cross-panel" in Part B1!

Rumour: Choose the panel "strategically" in order to increase chances of success

**NOT true:** The budget is distributed among the scientific panels as a function of demand → success rate is equal amongst panels → choose the Panel that is right for your proposal in the individual PI calls!



# 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] <a href="https://erc.europa.eu/news-events/news/erc-scientific-council-decides-changes-evaluation-forms-and-processes-2024-calls">https://erc.europa.eu/news-events/news/erc-scientific-council-decides-changes-evaluation-forms-and-processes-2024-calls</a> (Dec. 2022)





# ERC & Lump Sums

#### How will the ERC take on board Lump Sums?

Details to be checked in WP2024

- Lump Sum to be introduced only for Advanced Grants 2024 on pilot basis
- Lump Sum funding defined up-front and fixed in the grant agreement without financial reporting
- To ensure successful implementation, series of preconditions need to be fulfilled for Scientific Council, taking into account specificities of frontier research:
  - Continue to support high-risk, blue-sky frontier research
  - **Excellence** remains ERC's sole evaluation criterion
  - Autonomy of Principal Investigator
  - No need for milestones or deliverables
  - Approach to portability & flexibility of ERC grants remain unchanged
- Scientific Council agreed [2] conditionally to introduce lump sums for Advanced Grants as pilot in 2024 ERC Work Programme, detailed work on implementation ongoing



# 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

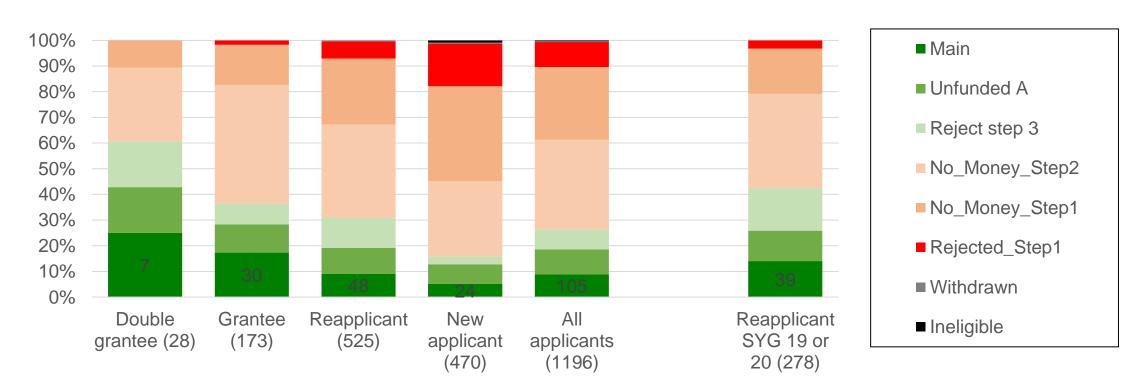




# SyG2022 Results depending on the type of applicant

## 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: <a href="https://erc.europa.eu/apply-grant/synergy-grant">https://erc.europa.eu/apply-grant/synergy-grant</a>
- 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: for StG use <a href="mailto:ERC-2024-STG-APPLICANTS@ec.europa.eu">ERC-2024-STG-APPLICANTS@ec.europa.eu</a> (replace for other calls StG with CoG/AdG, SyG mailbox: <a href="mailto:ERC-SYG-APPLICANTS@ec.europa.eu">ERC-SYG-APPLICANTS@ec.europa.eu</a>)
- 7. Get the written consent of your collaborators before the submission deadline (a simple email ercexchange is OK)

### Thank You!

ERC-SYG-APPLICANTS@ec.europa.eu Agnes.Kulcsar@ec.europa.eu

Israeli NCP:

Smadar Hirsh: <a href="mailto:smadar@iserd.org.il">smadar@iserd.org.il</a>

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## Background slides





### Anyone from anywhere in the world can apply

#### Opportunities for researchers outside EU/Associated Countries:

- Additional "start-up" funding for researchers moving to Europe (€ 1 Mio irrespective of grant scheme)
- Grantees can keep affiliation with home institute outside Europe ("significant part" of work time in Europe: at least 50%)
- Team members can be based outside Europe
- Grantees can move within Europe with the grant
- Keep in mind that host institutions have to be in the EU or Associated Country. In SyG, up to 4 PIs can apply, and one of them (not the corresponding one) can apply with an institution outside Europe.

### Why to apply for ERC grant?

ERC offers independence, recognition & visibility to:

- work on a research topic of own choice
- gain financial autonomy for 5 years in individual grants, 6 years in Synergy grants
- negotiate the best conditions of work with the host institution
- attract excellent team members and collaborators from anywhere in the world
- move with the grant to any place in Europe if desired ("portability of grants")
- win additional funding





## ERC Visiting Fellowship Programmes (VFP) ERC website: Additional opportunities | ERC (europa.eu)

ERC promotes the efforts of national and regional authorities that set up and fund mobility programmes to allow potential ERC candidates to visit and gain experience with ERC-funded teams

#### VFP in few points:

- Duration of visits 1-6 months (up to 2019 the minimum duration was 3 month)
- Visiting fellows commit to apply for an ERC grant in specified timeframe in their funbsing agreement
- Visiting fellows need to have a letter of support of the proposed host researcher and institution when applying
- National/regional funding agencies cover the travel and salary costs of the fellows for the duration of the visit
- Observation: The success rate of VFP fellows is higher than of Widening countries, in particular for Starting Grants

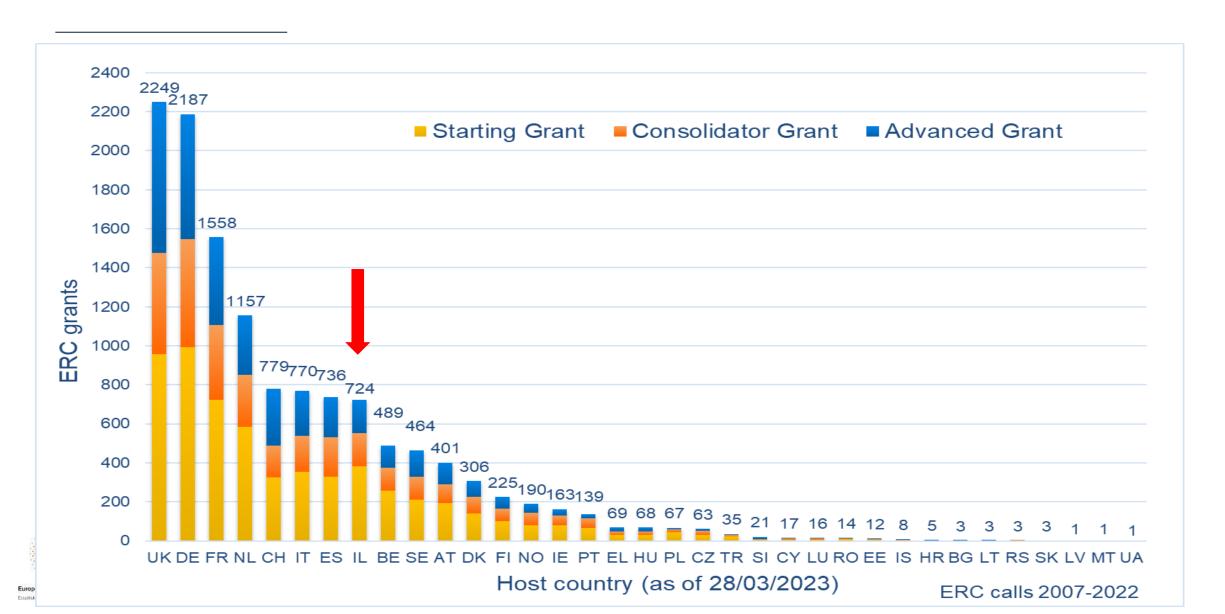




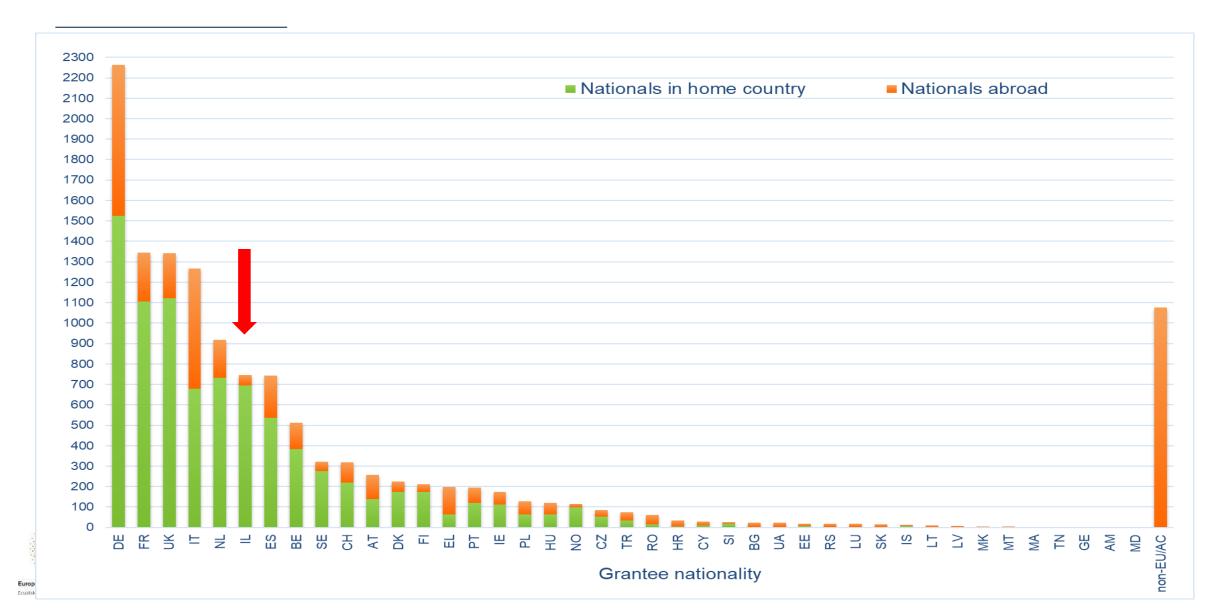
## ERC Mentoring Initiative ERC website: Additional opportunities | ERC (europa.eu)

- ERC support will consist of identifying ERC grantees and former panel members who
  could serve as external mentors to help the pre-selected PIs to strengthen the quality of
  their application, enabling them to get expert scientific feedback on their proposal (or
  mock interviews) before submission.
- ERC Mentoring Initiative is available via local offices in the EU Member States and Associated Countries whose mentoring requests were accepted by the ERC.
- National/regional offices are envisaged to participate.

### ERC-funded projects by country of Host Institution



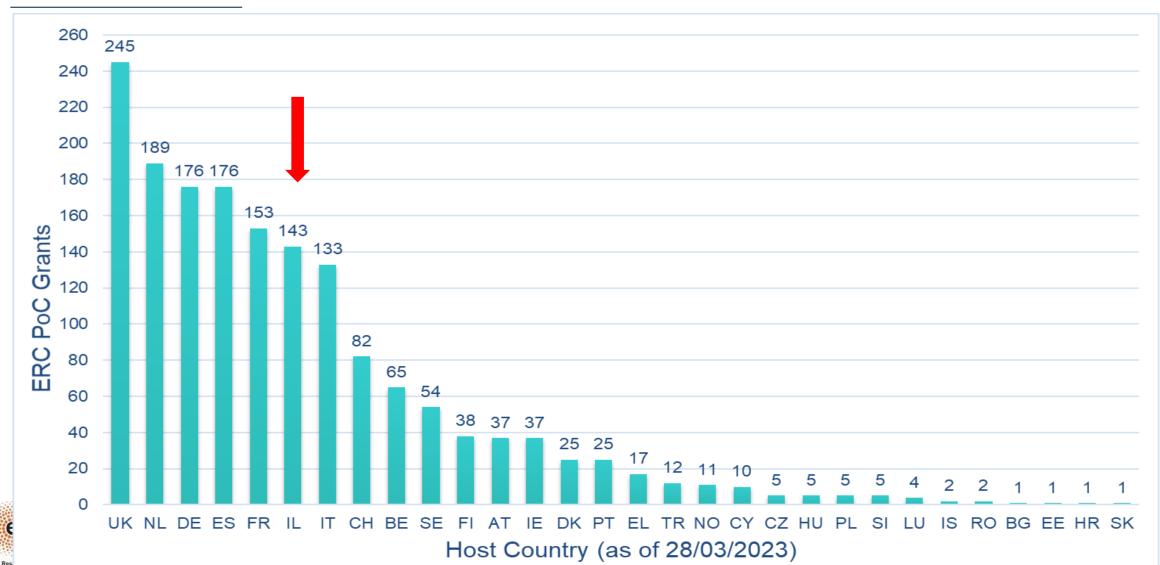
### Nationals at home and abroad



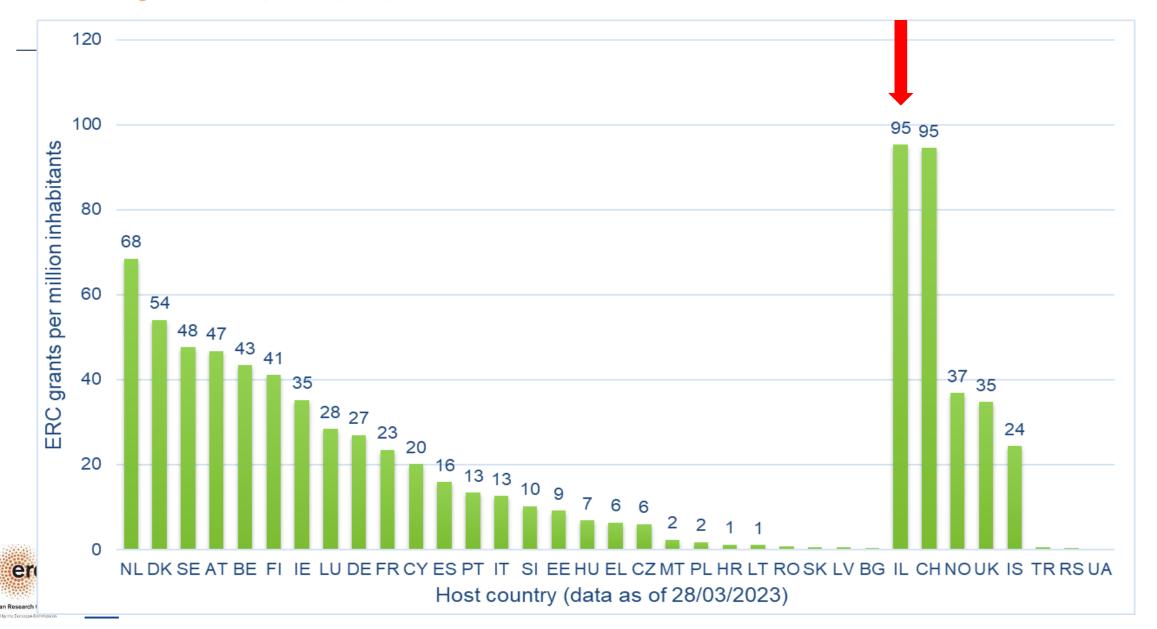
# 50 non-EU/AC grantee nationalities - 8% of all ERC grants

Non-EU/AC Principal Investigators	Starting and Consolidator grants	Advanced grants	Total main grants	Synergy grantees
USA	276	142	418	28
Canada	100	21	121	3
China	77	2	79	1
India	73	3	76	2
Australia	59	16	75	2
Russia	62	11	73	6
Japan	32	9	41	2
New Zealand	19	6	25	1
Argentina	23	2	25	
Other	141	13	154	1
Total	862	225	1087	46

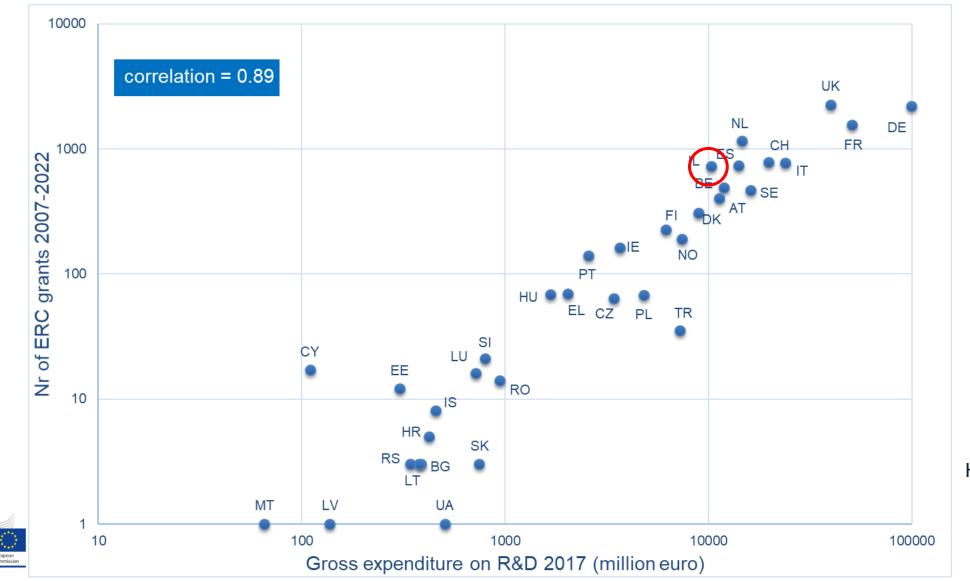
## ERC Proof of Concept 2011-2022



## ERC grants per population



### ERC grants versus gross expenditure on R&D



Host countries as of 28/03/2023

