## The European Research Council

An Introduction to the ERC

Dr. Catherine BALLERIAUX Scientific Officer 28/092021 Webinar Series 2021



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# ERC is....1. Funding: it is part of Horizon Europe



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### ERC is.... 2. The Scientific Council



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(Physics)

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### ERC is.... 3. The ERCEA



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### **ERC** basics



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#### Generous grants, Independence, Recognition & Visibility

- Work on any research topic: completely **bottom-up**, with a team of own choice
- Gain **financial autonomy** for up to 5 years
- Host Institution can be in any EU Member State / Associated Country
- Portability of grants: negotiate the best work conditions with the Host Institution
- Attract top team members and collaborators from worldwide
- Attract additional funding and gain **recognition:** ERC is a quality label





### ERC funding schemes



StG

#### **Starting Grant**

Size of the grant: up to €1.5 million + up to €1 million
Duration: up to 5 years
2-7 years of experience since completion of their PhD

#### **Consolidator Grant**



Size of the grant: up to €2 million + up to €1 million Duration: up to 5 years 7-12 years of experience since completion of their PhD

#### **Advanced Grant**



Size of the grant: up to €2.5 million + up to €1 million Duration: up to 5 years An excellent scientific track record of recognized achievements in the last 10 years

### ERC funding schemes



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#### Synergy grant

Size of the grant: €10 million + up to €4 million Duration: up to 6 years Be composed of 2 to 4 researchers and their research groups (one researcher can be based outside EU/AC)

#### **Proof of Concept**



Size of the grant: €150 000 Duration: up to 18 months Demonstrate that the idea funded by the original ERC grant has innovation potential and significant economic or societal benefits



### Synergy Grants



- A group of two to maximum four Principal Investigators (PIs) of which one will be designated as the corresponding PI (cPI) – working together and bringing different skills and resources to tackle ambitious research problems. No specific eligibility criteria regarding the academic training are foreseen for ERC Synergy Grants. PIs must present an early achievement track-record or a ten-year track-record, whichever is most appropriate.
- Proposals will be evaluated on the sole criterion of scientific excellence which, in the case the ERC Synergy Grants, takes on the additional meaning of outstanding intrinsic synergetic effect.
- Three-step evaluation process





### **Principal investigator and commitment**

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#### PI Profile:

- Any current place of work but working or moving to work in Europe (EU member state or H2020/HE Associated Country)
- Any nationality or age
- StG: 2-7; CoG: 7-12 years of experience after PhD; AdG: no constraints
- Potential (StG) / evidence (CoG) for independence and maturity; strong leadership (AdG)
- Good track-record appropriate to their research field and career stage

#### PI Commitment:

- Minimum 50% (StG), 40% (CoG), 30% (AdG) of PI working time on ERC project
- Minimum 50% of PI working time in an EU Member State or Associated Country



### **Additional funding**



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Additional funding can be requested to cover the costs below:

- Up to € 1.0m for Starting / Consolidator / Advanced grants
- Up to € 4.0m for Synergy grants
- (a) "start-up" costs for Principal Investigators moving to the EU or an Associated Country from elsewhere as a consequence of receiving the ERC grant and/or
- *(b) the purchase of major equipment and/or*
- (c) access to large facilities and/or
- (d) other major experimental and field work costs, excluding personnel costs.



Horizon 2020 European Union funding for Research & Innovation

### PIs from all over the World Can Apply to ERC



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### **Opportunities for non ERA\* researchers:**

- Additional "start-up" funding for researchers moving to Europe (1 M€ irrespective of call scheme)
- Grantee 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
  - ERA = European Research Area (EU + Associated Countries)



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### 48 Non EU/AC Nationalities



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### Over 8% of all ERC grants have principal investigators of non-EU/AC nationality

Non-EU/AC Principal Investigators	Starting and Consolidator grants	Advanced grants	Total grants
USA	236	128	364
Canada	87	16	103
India	59	3	62
Russia	53	9	62
Australia	49	11	60
China	52	1	53
Japan	29	8	37
New Zealand	17	6	23
Argentina	19	1	20
Other	111	13	124
Total	712	196	908



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Australia

#### ERC evaluated proposals from Australia nationals, by call scheme and domain:

	Life Sciences	Physical Sciences and Engineering	Social Sciences and Humanities	Grand Total
Starting	72	86	60	218
Consolidators	20	41	32	93
Advanced	22	46	37	105
Grand Total	114	173	129	416

#### ERC grants to Australia nationals, by call scheme and domain:

	Life Sciences	Physical Sciences and Engineering	Social Sciences	Grand Total
Starting	13	9	8	30
Consolidators	5	5	9	19
Advanced	4	2	5	11

Number of Australian PIs based in Australia at the time of application: 55 out of 416 Australian applicants (of which 3 successful).





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#### ERC Evaluated proposals from NZ nationals, by call scheme and domain:

	Life Sciences	Physical Sciences and Engineering	Social Sciences and Engineering	Grand Total
Starting	24	22	18	64
Consolidators	5	13	4	22
Advanced	9	15	12	36
Grand Total	38	50	34	122

#### ERC grants to NZ nationals, by call scheme and domain:

	Life Sciences	Physical Sciences and Engineering	Social Sciences and Engineering	Grand Total
Starting	4	2	6	12
Consolidators	2	2	1	5
Advanced	2	2	2	6
Grand Total	8	6	9	23

Number of NZ PIs based in New Zealand at the time of application: 1 out of 122 applicants (application not successful).



**New Zealand** 

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### 2022 Call Calendar



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ERC calls	Call Opening	Submission Deadline
Starting Grants ERC-2022-StG	23/09/2021	13/01/2022
Consolidator Grants ERC-2022-CoG	19/10/2021	17/03/2022
Advanced Grants ERC-2022-AdG	20/01/2022	28/04/2022
Synergy Grants ERC-2022-SyG	15/07/2021	10/11/2021
Proof of Concept ERC-2022-PoC1 ERC-2022-PoC2	15/07/2021 16/11/2021	14/10/2021 15/02/2022, 19/05/2022, 29/09/2022



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### **ERC** Panel structure

#### Life Sciences (LS)

- LS1 Molecules of Life: Biological Mechanisms, Structures and Functions
- LS2 Integrative Biology: from Genes and Genomes to Systems
- LS3 Cellular, Developmental and Regenerative Biology
- LS4 Physiology in Health, Disease and Aging
- 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
- 3 Domains / 27 Panels
- Operated by the Scientific Department B





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#### Social Sciences and Humanities (SSH)

- SH1 Individuals, Markets and Organisations
- SH2 Institutions, Governance and Legal Systems
- SH3 The Social World and Its Diversity
- SH4 The Human Mind and Its Complexity
- SH5 Cultures and Cultural Production
- SH6 The Study of the Human Past
- SH7 Human Mobility, Environment, and Space
  Physical Sciences & Engineering (PSE)
- PE1 Mathematics
- PE2 Fundamental Constituents of Matter
- PE3 Condensed Matter Physics
- PE4 Physical & 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

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### Structure of the application



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#### Part A

- ✓ General information, budget, ethics review
- Part B1
  - ✓ 5 pages of project synopsis
  - Include brief methodology and feasibility
  - ✓ CV and track record
- Part B2
  - ✓ 15 pages
  - Include extensive methodology and work plan
  - Cover: risks mitigation, open access costs, team

#### ✓ Host institution letter



### How are the ERC proposals evaluated

For individuals calls: a single submission but a two step evaluation



**STEP 1 STEP 2** Remote assessment by Panel members Remote assessment by Panel members see ONLY section 1: Synopsis and CV and Remote Reviewers of full proposals (Part B1) (Part B1+B2) **Panel meeting** Panel meeting + interview StG, CoG and AdG Ranked list of proposal Proposal Rejected Proposal Retained For step 2 (Score A) (Scores A&B) (Scores B&C) Feedback to applicants European | 19 Commission

### Contrary to what you may think

- ERC funds "frontier research", including applied research.
- The budget is distributed among the scientific panels as a function of demand.
- The panel descriptors do not represent ERC scientific priorities.
- The success rate is virtually flat across the eligibility window (StG, CoG).
- Publication record is not decisive in selection decisions.
- The Host Institution is not an evaluation criterion.







### **Evaluation process**



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### is the sole evaluation criterion

#### **Excellence of the Research Project**

- Ground breaking nature
- Potential impact
- Scientific Approach



#### Excellence of the Principal Investigator

- Intellectual capacity
- Creativity
- Commitment

# How to prepare a successful ERC proposal?



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- Have a bright, original idea
- Design a research project to implement the idea
- Get a letter of support from a Host Institution where the project is to be carried out (EU/AC)
- Make sure you are **eligible** (StG/CoG extensions!)
- Register early, get familiar with the system and templates and start filling in the forms
- Consider the balance between addressing generalists and specialists, and the difference between part B1 and part B2 of the written proposal
- Seek for feedback / Organize mock interviews (StG/CoG)
- If rejected, keep trying! (reapplications have a much higher success rate feedback from panels is valuable both for resubmitting and to advance your own research)



### What are the panel members looking for? In your proposal



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#### Fund frontier research projects:

- Does the project go substantially beyond the state of the art?
- Why is the proposed project important?
- Is it timely? (Why wasn't it done in the past? Is it feasible now?)
- What's the **risk**? Is it justified by a substantial potential **gain**? Is there **a plan** for managing the risk?

#### Fund the future leaders in the field:

- Why is the PI the best person to carry it out?
- Is the PI internationally competitive as a researcher at his/her career stage and in his/her discipline? (up to 5 publications for StG, up to 10 for CoG, 10 publications in major scientific journals for AgG)
- Is there evidence that the PI is able to work independently, and to manage a 5year project with a substantial budget?







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

★ 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.

★ 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. (Of course this does not apply for applications to a Proof of Concept grant.)

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

★ 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.



### Where can you find more information?





#### European Commission

#### Videos - ERC Classes

- What to consider before applying
- How to fill in the application (Part B1 and B2)
- The interview
- How the evaluation works

https://www.youtube.com/watch?v=x bFbzkVWgCU&list=PLtv6FnsXqnXA YRk6HCErwMxwML0ZKoMcy Where can you find more information?



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Our website:

erc.europa.eu

Our social media channels:

National Contact Points (NCP):

https://erc.europa.eu/funding/national-contact-points

Funding & Tender Opportunities:

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





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## Thank you!

Catherine.BALLERIAUX@ec.europa.eu



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