The European Research Council

Overview on the ERC and funding opportunities

Maria Leptin ERC President





ERC mission

Established by the EU in 2007 "to reinforce excellence, dynamism and creativity in

European research", ERC supports excellence in frontier research through a bottom-up,

individual-based, pan-European competition.

Budget

€ 16 billion (2021-2027) – 2.3 billion €/year

€ 13 billion (2014-2020) - 1.9 billion €/year

€ 7.5 billion (2007-2013) - 1.1 billion €/year

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







ERC in figures



Over **13,000** top researchers funded since the ERC creation in 2007



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



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



Over **400** start-ups identified as founded or co-founded by ERC grantees



Over **220,000** articles from ERC projects published in scientific journals



Over **930** research institutions hosting ERC grantees – universities, public or private research centres in the EU or Associated Countries



93
nationalities of grant holders



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





Impact beyond science

- 44% of ERC grants 2007-2016 generated research subsequently cited in patent applications worldwide
- 13% of ERC grantees filed their own patent applications based on the work funded with their ERC grant
- 11% of ERC grantees created companies or transferred results of their research to pre-existing companies
- over 400 companies founded by ERC-supported researchers

https://erc.europa.eu/sites/default/files/2023-01/Assessing_the_Influence_ERC-funded_Research_Patented_Inventions.pdf

In the top league of funders in the world

Name

European Research Council (ERC) Wellcome Trust

NIH National Cancer Institute (NCI)

National Science Foundation (NSF)

National Health and Medical

Research Council of Australia

Australian Research Council

Medical Research Council UK

United States Department of Energy (DOE)

40,422 41.040

123.864

55,496

38,442

43,462

617,950

380,893

40,898

65,631

Papers

2.10 2.09

2.08

2.08

1.75

1.73

1.73

1.70

1.65

2.46

Category

normalized

citationimpact

3.60%

3.92% 3.68%

Percentage

4.84%

top 1% papers

39.39% 29.69%

Percentage

internationally

collaborative

papers

59.24%

55.62%

48.81%

"The ERC had the highest category normalised citation impact, the highest percentage of papers in the world's top 1% and the highest percentage of papers involving international coauthorship of the 50 funders most frequently acknowledged by authors in the Web of Science between 2007 and 2016 "

NIH National Heart Lung & Blood Institute (NHLBI) Federal Ministry of Education

30.092 Swiss National Science Foundation 50,598

1.95 1.90 3.27% 3.01%

3.76%

2.68%

2.61%

2.76%

2.31%

2.26%

28.81%

59.03% 48.12%

28.37% 36.36%

42.24%

50.65%

"The European Research Council - The first 10 years") erc



(Clarivate Analytics –



& Research (BMBF) National Institutes of Health (NIH) - USA7

Why to apply for an ERC grant

ERC offers independence, recognition & visibility to:

- work on a research topic of own choice
- gain financial autonomy for five years
- 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")



ERC grant schemes



Starting Grants

starters (2-7 years after PhD) up to € 1.5 Mio for 5 years



Advanced Grants

track-record of significant research achievements in the last 10 years up to € 2.5 Mio for 5 years





Consolidator Grants

Consolidators (7-12 years after PhD) up to € 2 Mio for 5 years



Synergy Grants

2 – 4 Principal Investigators up to € 10.0 Mio for 6
years
1 PI can be based outside EU/Associated
Countries





Proof-of-Concept

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

Evaluation

Excellence

is the sole evaluation criterion

Excellence of the Research Project

- Ground-breaking nature
- Ambition

Excellence of the Principal Investigator

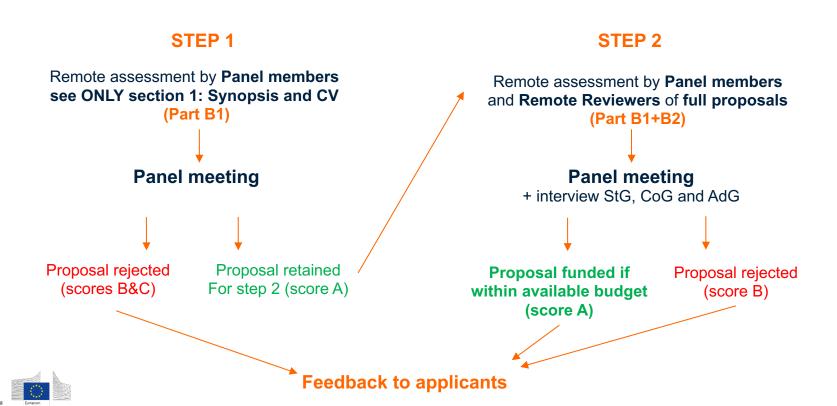
- Intellectual capacity
- Creativity
- Commitment





Evaluation: process

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



Evaluation panel structure (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





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

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

48 non-EU/Associated Country grantee nationalities - 8% of all ERC grants

Non-EU/AC Principal Investigators	Starting and Consolidator grants	Advanced grants	Total main grants
USA	295	139	434
Canada	110	20	130
China	86	1	87
India	79	3	82
Australia	62	16	78
Russia	65	11	76
Japan	34	10	44
New Zealand	21	6	27
Argentina	24	2	26
Other	157	13	170
Total	933	221	1154



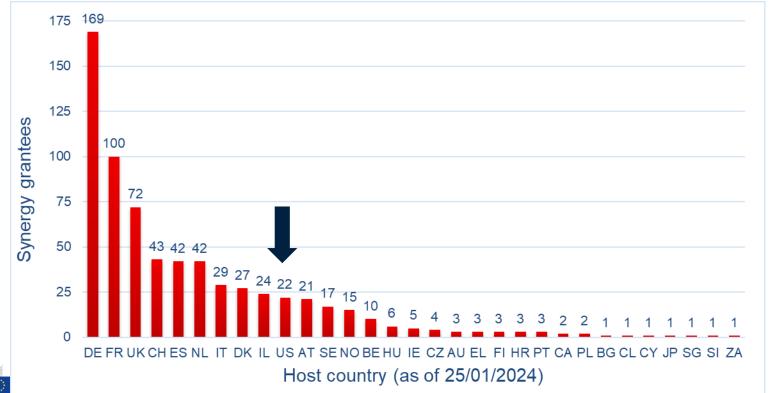


ERC Synergy open to non-EU

One Principal Investigator per Synergy Grant Group (except the coordinator) can be based in a "Third Country".



Synergy grantees in Third Countries







22 Synergy Grantees in the US

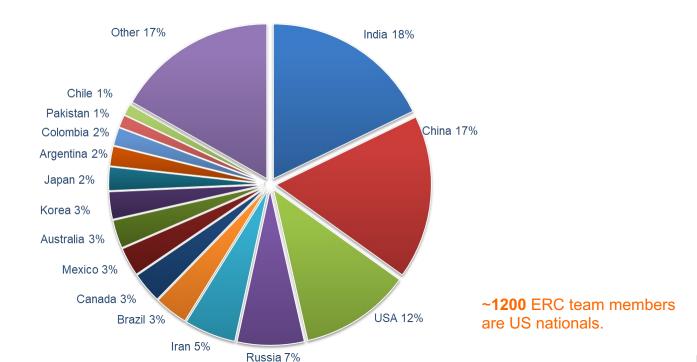
Host institutions

Massachusetts Institute of Technology	4
University of California, Berkeley	3
Harvard University	3
Institute for Advanced Study	2
Duke University	1
University of Delaware	1
Columbia University	1
University of Wisconsin–Madison	1
Icahn School of Medicine at Mount Sinai	1
New York University	1
Dartmouth College	1
Northwestern University	1
Brown University	1
Johns Hopkins University	1
Total	22



Attracting researchers to Europe

In ~2,000 H2020 grants, over 18% team members were from:







ERC Implementing Arrangements (IA)

The Implementing Arrangements, are international initiatives promoting opportunity for researchers to visit and collaborate with ERC teams, partially supported by non-European agencies.



List of all signed IA

USA, National Science Foundation (NSF)

Republic of Korea, National Research Foundation (NRF)

Argentina, Ministry of Science, Technology and Productive Innovation (MINCYT)

China, National Natural Science Foundation of China (NSFC)

Japan, Japan Society for the Promotion of Science (JSPS); Japan Science and Technology Agency (JST); Japan Agency for Medical Research and Development (AMED)

South Africa, National Research Foundation (NRF)

Mexico, Mexican National Council of Science and Technology (CONACYT)

Brazil, Brazilian National Council of the State funding agencies (CONFAP)

Canada, Canadian Tri-Agency Institutional Programmes Secretariat (TIPS)

India, Scientific Engineering Research Board (SERB); Indian Social Sciences Research Council (ISSRC)

Australia, National Health and Medical Research Council (NHMRC); Australian Research Council (ARC)

Singapore, National Research Foundation Singapore (NRF)

Thailand, Program Management Unit for Human Resources & Institutional Development, Research and Innovation of Thailand (PMU-B)





ERC Implementing Arrangement with the National Science Foundation

Signed in July 2012.

Objective: enable US scientists supported by the NSF CAREER awards or NSF's Postdoctoral Research Fellowships to undertake research visits to ERC teams.

NSF CAREER awardees: Single and long-term (e.g., 6-12 months) or multiple short-term visits.

NSF Postdoctoral Fellows: Single and long-term research visits.

140 US researchers undertook research visits to ERC teams from 2012 to 2023.



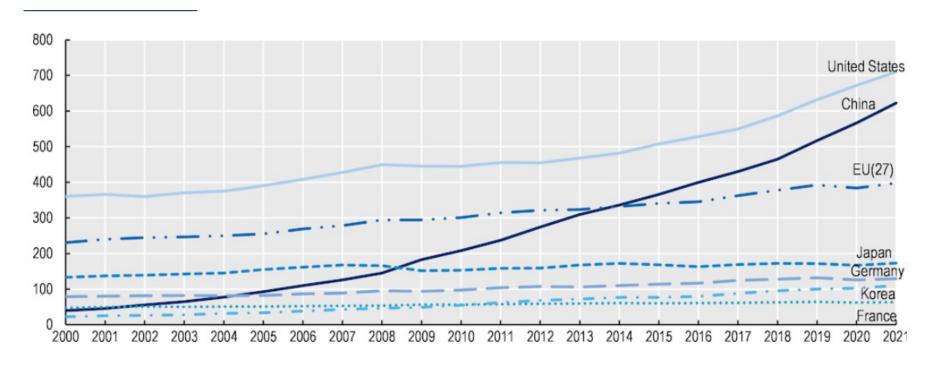
FP10 timetable





start of next Framework Programme: 1 January 2028

Increasing global competition







Gross domestic expenditure on R&D (GERD), selected economies, 2000-21 US dollar billion in constant purchasing power parity prices

Statement by the ERC Scientific Council on FP10 (III)

 build on the ERC success and strengthen it in the next research framework programme

 modernise the long-term EU budget and double the spending for research and innovation in the next Multiannual Financial Framework

 protect the ERC's independence and autonomy under FP10 to safeguard its position as Europe's top frontier research funder



Thank You!

More information: erc.europa.eu



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