ERC Grants

for Top Researchers from Anywhere in the World

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European Commission and ERC



from 2007 onwards ...



Directorate-General Research and Innovation (RTD)



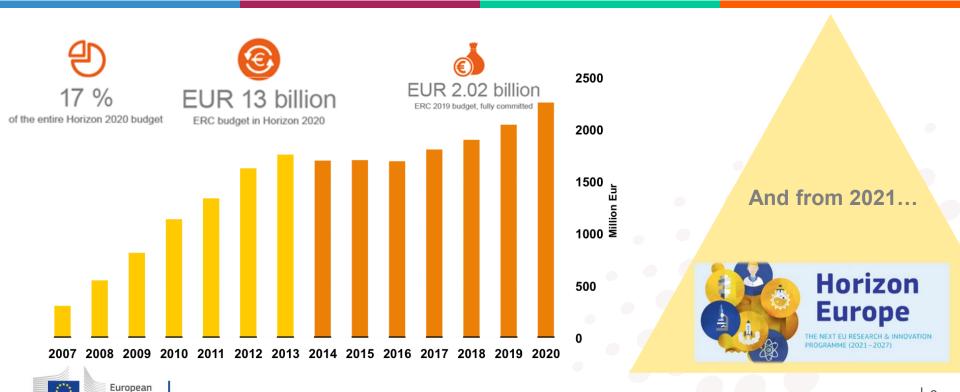


ERC is....

Commission

1. Funding: it is part of **Horizon 2020** (2014-2020)





ERC is....

2. The Scientific Council





Prof. Jean-Pierre BOURGUIGNON Interim ERC President



Prof. Janet THORNTON (Bioinformatics and Structural Biology) ERC Vice-President



Prof. Fabio ZWIRNER (Theoretical and High-Energy Physics) ERC Vice-President



Prof. Eveline CRONE (Psychology)



Prof. Geneviève ALMOUZNI (Biology)



Prof. Manuel ARELLANO (Economics)



BOVOLENTA (Neurobiology)



Prof. Margaret BUCKINGHAM (Biology)



FERINGA (Organic Chemistry)



Prof. Mercedes GARCÍA-ARENAL (History)



Prof. Gerd GIGERENZER (Psychology)



Prof. Andrzej JAJSZCZYK (Electronics and Communication Engineering)



Prof. Eystein JANSEN (Earth Science)



Prof. Tomas JUNGWIRTH (Condensed Matter Physics)



Prof. Michael KRAMER (Astrophysics)



MEHLHORN (Computer Science)



Prof. Barbara ROMANOWICZ (Geophysics)



Prof. Jesper SVEJSTRUP (Biology)



Prof. Nektarios TAVERNARAKIS (Molecular Systems Biology)



Prof. Lene VESTERGAARD HAU (Physics)



Milena ŽIC FUCHS (Lingustics)



ERC is.... 3. The ERCEA

erc **European Research Council** Established by the European Commission

The Executive Agency is

Implementing the ERC Work Programme

(including the evaluation process and the payments to running projects, etc.)



ERC basics







IN ANY FIELD OF FRONTIER RESEARCH









Facts and figures





> 10,500

projects of all types funded by the ERC since 2007



82

nationalities (ERC grantees)



34

EU and Associated Countries hosting ERC projects



> 125,000

publications reported by ERC projects



> 1,300

prestigious prizes awarded to ERC grantees



> 75,000

researchers and other professionals hired in ERC teams



ERC funding schemes





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





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



Pls from all over the World Can Apply to ERC



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
- Grantee can move within Europe with the grant





2021 Call Calendar (expected dates)



ERC calls	Expected Call Opening	Expected Submission Deadline(s)		
Starting Grants ERC-2021-StG	12/01/2021	09/03/2021		
Consolidator Grants ERC-2021-CoG	21/01/2021	20/04/2021		
Advanced Grants ERC-2021-AdG	20/05/2021	31/08/2021		
Proof of Concept ERC-2021-PoC (cut off dates)	14/01/2021	16/03/2021 17/06/2021 20/10/2021		
Synergy Grants ERC-2021-SyG	No Synergy Grant call in 2021			



! Inofficial, pending the publication of 2021 ERC Work Programme!

ERC Panel structure – 2021 Calls (just updated)



3 Domains / 27 Panels :

Physical Sciences & Engineering (PE)

- 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

Social Sciences and Humanities (SH)

- SH1 Individuals, Markets and Organisations
- SH2 Institutions, Values, Environment and Space
- SH3 The Social World, Diversity, Population
- 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

Life Sciences (LS)

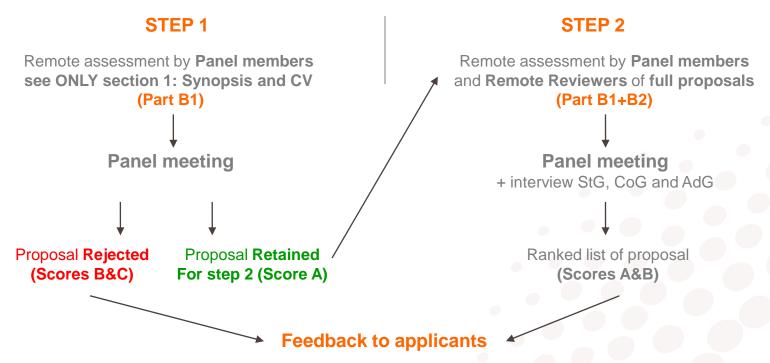
- LS1 Molecular Biology, Biochemistry, Structural Biology and Molecular Biophysics
- LS2 Genetics, 'Omics', Bioinformatics and Systems Biology
- LS3 Cellular and Developmental Biology
- LS4 Physiology, Pathophysiology and Endocrinology
- LS5 Neuroscience and Neural Disorders
- LS6 Immunity and Infection
- LS7 Applied Medical Technologies, Diagnostics, Therapies, and Public Health
- LS8 Ecology, Evolution and Environmental Biology
- LS9 Applied Life Sciences, Biotechnology and Molecular and Biosystems Engineering



How are the ERC proposal evaluated







Evaluation process





Excellence of the Research Project

- Ground breaking nature
- Potential impact
- Scientific Approach

Excellence of the Principal Investigator

- Intellectual capacity
- Creativity
- Commitment



Particular emphasis on...



Research @ the frontiers of science, scholarship and engineering, i.e.

- Multi- or interdisciplinary proposals which cross boundaries between different fields of research, or
- Pioneering proposals addressing new and emerging fields of research, or
- Proposals introducing unconventional, innovative approaches and scientific inventions.





Contrary to what you may think



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





Some rumours



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 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. (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.

X NOT true: ERC funds frontier research, irrespective of the field and whether it has societal, medical or clinical applications. → Excellence only!



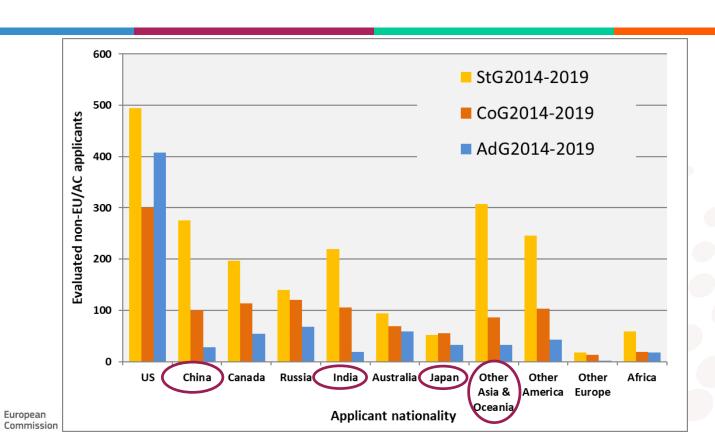


INTERNATIONAL PARTICIPATION TO ERC



<u>Applications:</u> H2020 ERC Calls Evaluated Proposals from non-EU/AC Nationals

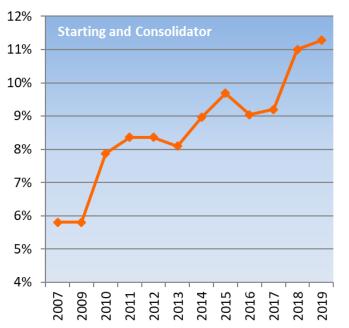


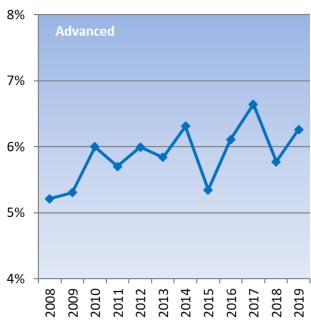


Increased Participation to H2020 Starting and Consolidator Calls



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







Funded: 47 Non-EU/AC Nationalities



Incl.

MY

TH

Over 8% of all ERC grants have PIs of non-EU/AC nationality

Non-EU/AC Principal Investigators	Starting and Consolidator grants	Advanced grants	Total grants
USA	227	121	348
Canada	83	16	99
India	59	3	62
Russia	50	9	59
Australia	49	10	59
China	50	1	51
Japan	25	7	32
New Zealand	17	6	23
Argentina	19	1	20
Other	106	13	119
Total	685	187	872



Grantees outside EU/AC at Application

→ Both EU/AC nationals (applying to return) & non EU/AC nationals



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Country of residence	International grantees	EU/AC nationals	Total
Argentina	1		1
Australia	2	7	9
Brazil	1		1
Canada	5	8	13
China		2	2
Egipt		1	1
India	1	1	2
Japan		2	2
Korea		1	1
Lebanon		1	1
Malaysia		1	1
Pakistan		1	1
Russia	3		3
Senegal		1	1
USA	62	157	219
Total	75	183	258



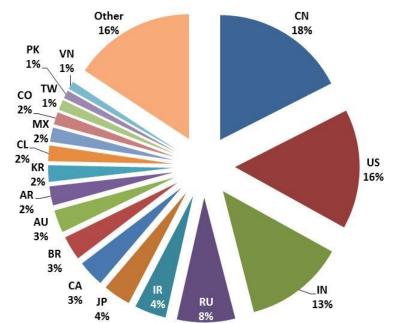
ERC project teams: Attracting Researchers to Europe



Nationality of ERC project teams (PIs not included) Analysis of **1,901** Starting and Advanced Grants

EU: 71%
Assoc. Countries: 10%
non-EU/AC: 17%
unknown: 2%

In all ERC grants
over 10,000 non-ERA team members
most from
China, US, India, and Russia





Examples of International Grantees ERC Funded Projects (Brazil)



Quasiperiodic

PE01: Mathematics

Dynamics of quasiperiodic type. Study of two distinct classes of dynamical systems which display a quasiperiodic component.

".....without the ERC fund, I would not have been able to explore some of the themes we worked on. the ERC grant allowed me to benefit from better working conditions and to continue my research in France more efficiently and comfortably, by surrounding myself with competent researchers with whom we made major progress on several questions.."

Researcher: Artur Avila Cordeiro De Melo (Brazil)

ERC Starting Grant 2010

HI: National Centre for Scientific Research, (France)





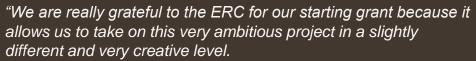
Examples of International Grantees ERC Funded Projects (Latin America & Caribbean)



activeFly

LS05: Neuroscience and Neural Disorders





Having the flexibility that the ERC gives you allows us to recruit very talented and diverse people from all around the world and it creates environment that nurtures creativity."

Researcher: Eugenia Chiappe (Argentina)

ERC Starting Grant 2017

HI: Champalimaud Foundation (Portugal)



Examples of International Grantees ERC Funded Projects (North America)



BOTFIND

Finding Bots, Detect Harassing Automation, and Restoring Trust in Social Media Civic Engagement

"...The ERC grant I received has been very important for my current research into computational propaganda. It's given us a good foundation to be able to figure out how to stop misinformation from spreading..."

Researcher: Phil Howard (Canada)

ERC Proof of Concept 2017

HI: University of Oxford (United Kingdom)





Examples of International Grantees ERC Funded Projects (South Eastern Asia)



CosTesGrav

Cosmological Tests of Gravity PE09: Universe Sciences

".... It is definitely easier to build useful long-term international links while based in Europe. I now benefit from personal links with researchers worldwide and more recently in China where a former ERC team member has relocated. I think it is positive that Europe is strengthening its links with East Asian countries as there are many benefits to boosting scientific cooperation between these countries..."

Researcher: Dr Kazuya Koyama (Japan)

ERC Consolidator Grant 2014

HI: University of Portsmouth (UK)





ERC during COVID19-crises:

→ Fully operational! (deadlines, evaluations, funding, ...)



- Selection of related ERC projects:
 - https://erc.europa.eu/list-erc-funded-research-projects-related-coronavirus

- For more ... look-up EU-funded coronavirus and pandemic research via the corona virus R&I pages:
 - https://ec.europa.eu/info/research-and-innovation/research-area/healthresearch-and-innovation/coronavirus-research-and-innovation_en



Where can you find more information?



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

