

The European Research Council: Funding opportunities for top scientists from anywhere in the world



European Research Council
Established by the European Commission

A photograph of a modern, curved glass building with a fountain in the foreground. A rainbow is visible in the mist from the fountain. The scene is surrounded by trees with autumn foliage.

Dr Luis Fariña Busto
Research Project Officer - Physical Sciences & Engineering
ERCEA Scientific Management Department

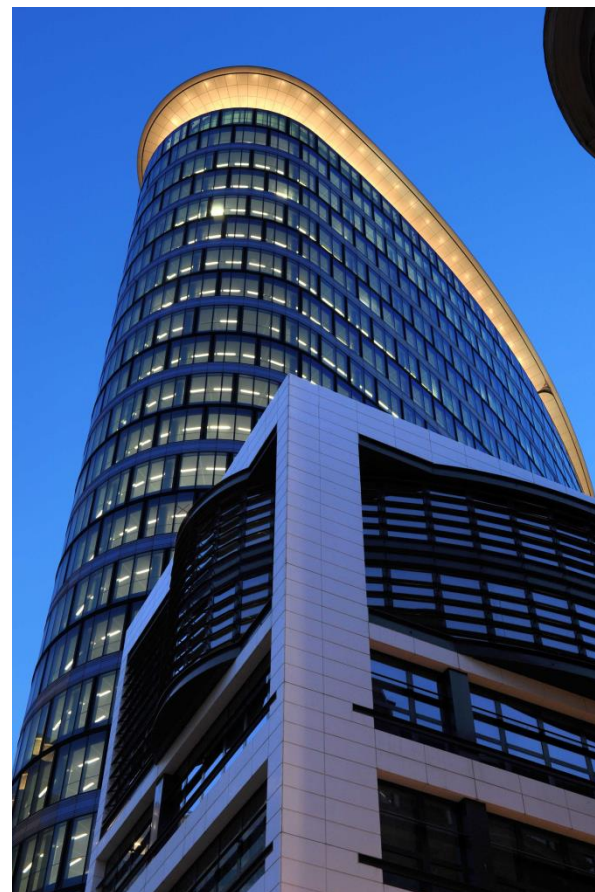
The 21st Particles & Nuclei International Conference
1-5 September 2017, IHEP, Beijing, China

A logo for the PANIC 2017 conference. It features the text 'PANIC 2017' in a stylized font, with '2017' in red. Below the text is a circular graphic resembling a particle detector or a stylized eye.

- **What is the ERC?**
- **What does ERC offer?**
- **How are ERC research proposals evaluated and by whom?**

What is the ERC?

- An autonomous funding body set up by the EU in 2007 and **led by scientists**
- Funding **excellent researchers of any nationality**
- To carry out frontier research in **all fields** of science and humanities
- **1 researcher, 1 Host Institution, 1 project, 1 selection criterion**
- **Substantial grants** and a recognised label of excellence
- International, top level **peer-review**

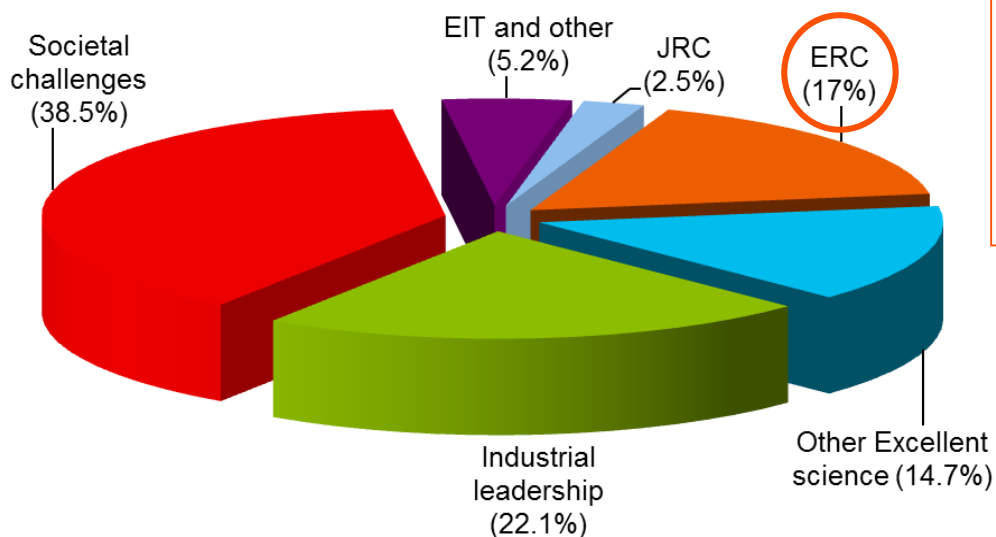


ERC in H2020

Budget 2014 - 2020

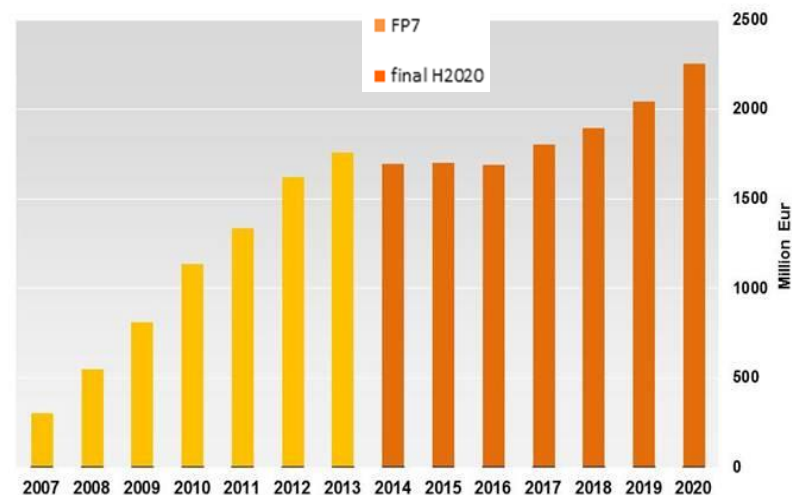


European Research Council
Established by the European Commission



H2020 budget
€77 billion ~ RMB 600 billion

ERC budget
€13 billion ~ RMB 100 billion



Almost € 2 billion ~ RMB 16 billion for calls in 2018

ERC in the H2020 Structure



➤ The HORIZON 2020 main components:

- Excellent Science
 - ➔ *World class science is foundation of technologies, jobs, well-being*
 - ➔ *Europe needs to develop, attract, retain research talent*
 - ➔ *Researchers need access to the best infrastructures*
- Industrial leadership
- Societal challenges

➤ Excellent Science:

- **European Research Council** (budget under H2020: € 13 billion)
- Future and Emerging Technologies
- Marie Skłodowska Curie Actions
- Research Infrastructures

What does ERC offer?

Creative Freedom of the Individual Grantee

ERC offers selective and generous grants, independence, recognition & visibility

- Work on any research topic: **completely bottom-up**
- Gain **financial autonomy** for 5 years
- Negotiate the **best work conditions** with the host institution
- Attract **top team members and collaborators** (EU and non-EU)
- **Portability of grants**
- **Attract additional funding and gain recognition: ERC is a quality label**



Who can apply?



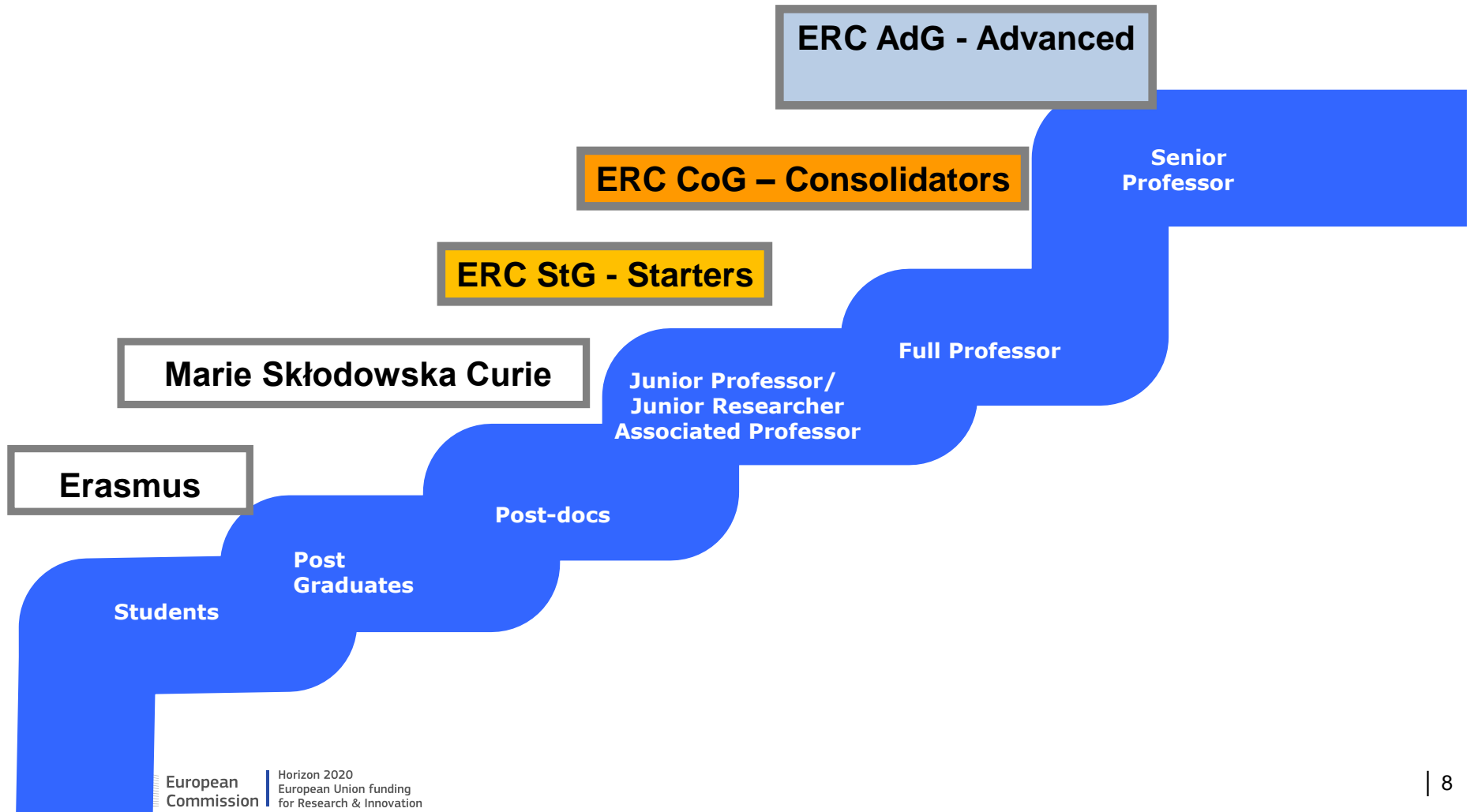
European Research Council
Established by the European Commission

- **Excellent Researchers**
- **Any nationality, any age** or any current place of work
- In conjunction with a **Host Institution based in Europe**: EU or H2020 associated countries

We want you to come to Europe for a significant period of time !



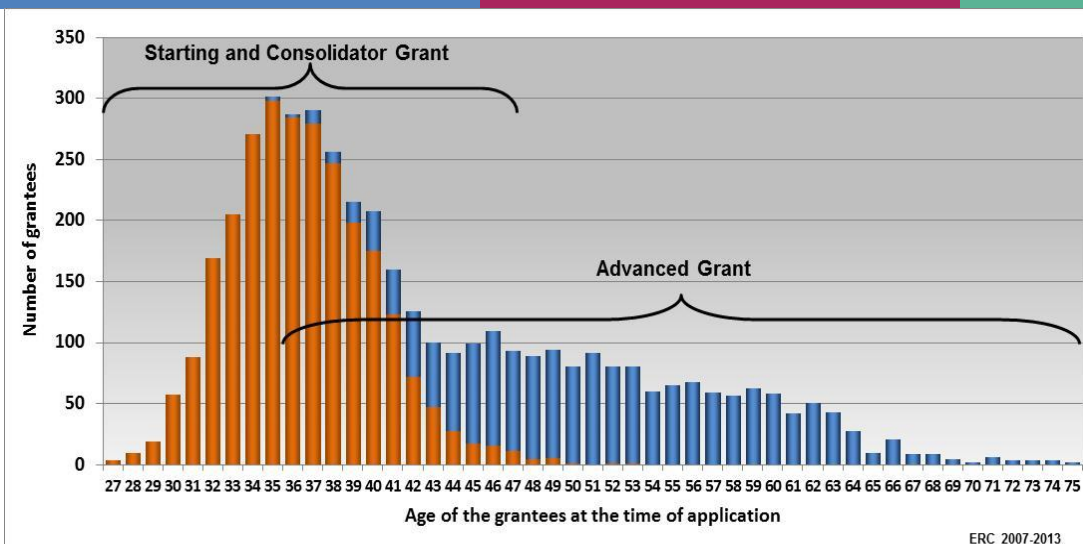
Researchers career development and complementary funding schemes



Priority to Young Scientists



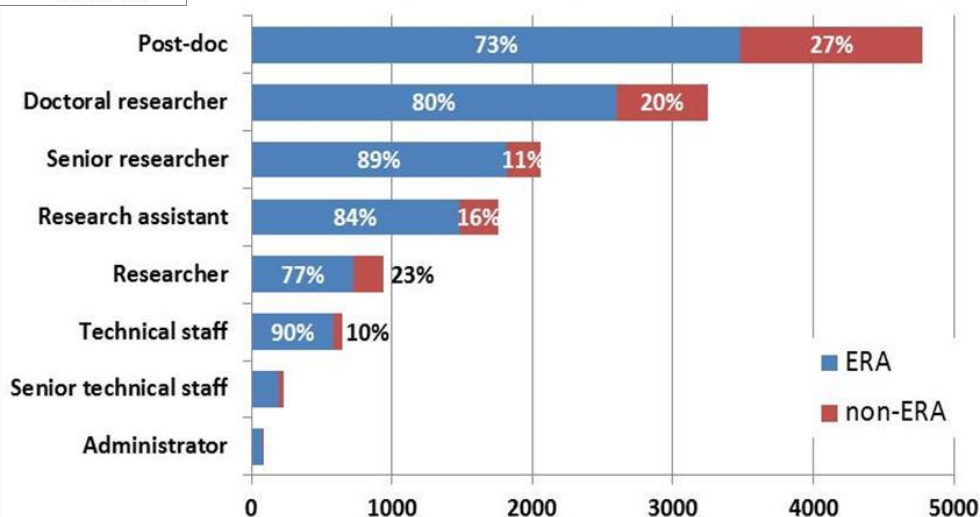
European Research Council
Established by the European Commission



> 40 000 PhD and post-doc researchers working in ERC teams.

Two-thirds of ERC grants to early-stage Principal Investigators.

Reported team members (2015)
head count (1901 projects; almost 14,000 team members)



What does ERC offer?

ERC Grant Schemes

Starting Grants

starters
2-7 years after PhD
(≥ 50% commitment)
up to € 1.5 Million
(+ € 0.5 Million)
for 5 years

Consolidator Grants

consolidators
7-12 years after PhD
(≥ 40% commitment)
up to € 2 Million
(+ € 0.75 Million)
for 5 years

Advanced Grants

track-record of
significant research
achievements in the
last 10 years
(≥ 30% commitment)
up to €2.5 Million
(+ € 1 Million)
for 5 years

Proof-of-Concept

bridging gap between research and earliest
stage of marketable innovation
up to €150,000 for ERC grant holders only

Synergy Grants

2 – 4 Principal Investigators
up to € 10 (+ 4) Mio for 6 years

Additional funding

- **Additional funding:**
 - 'Start-Up' costs for scientists moving to EU / Associated Countries
 - Purchase of major equipment
 - Access to large facilities
- Up to € 500 000 for Starting
- Up to € 750 000 for Consolidator
- Up to € 1 Million for Advanced grantees
- Up to € 4 Million for Synergy Grants



Extensions of eligibility window

Extensions of eligibility window possible for StG and CoG for documented cases of:

- Maternity – 18 months per child (before or after PhD)
- Paternity – actual time taken off
- Military service
- Medical speciality training
- Caring for seriously ill family members

No limit to the total extension

ERC Starting Grants (2-7 y past PhD)



- **Objective:** support excellent PIs at the stage at which they are **starting** their own independent research team or programme
- **Grant size:** €1.5M (possibility of additional €0.5M)
- **PI Profile:**
 - Potential for research independence
 - At least one publication as main author or without PhD supervisor
 - Invited presentations in conferences
 - Funding, patents, awards, prizes
 - 50% of PI's time in the project + 50% in the EU or AC

ERC Consolidator Grants (7-12 y past PhD)



- **Objective:** support excellent PIs at the stage at which they **may still be consolidating** their own independent research team or programme
- **Grant size:** €2.0M (possibility of additional €0.75M)
- **PI Profile**
 - Has achieved a certain degree of research independence
 - Several publications as main author or without PhD supervisor
 - Invited presentations in conferences
 - Funding, patents, awards, prizes, mentoring
 - 40% of PI's time in the project + 50% in the EU or AC

ERC Advanced Grants



- **Objective:** established research leaders with a **recognised track-record of research** achievements in the last 10 years
- **Grant size:** €2.5M (possibility of additional €1.0M)
- **PI Profile**
 - Active researchers with a significant track record in the last 10 years
 - 10 top publications/3 research monographs as main author
 - Invited presentations, organisation of major conferences
 - Funding, patents, awards, prizes, mentoring
 - 30% of PI's time in the project + 50% in the EU or AC

How are ERC proposals evaluated?

Excellence is the sole evaluation criterion

Evaluation of *excellence* at two levels:

- **Excellence of the Research Project**
 - ✓ Ground breaking nature
 - ✓ Potential impact
 - ✓ Scientific Approach
- **Excellence of the Principal Investigator**
 - ✓ Intellectual capacity
 - ✓ Creativity
 - ✓ Commitment

All topics are eligible, but the evaluation needs a concrete **ERC panel structure**

Each panel:
Panel Chair and 10-16 Panel Members

Life Sciences

- **LS1** Molecular and Structural Biology and Biochemistry
- **LS2** Genetics, Genomics, Bioinformatics and Systems Biology
- **LS3** Cellular and Developmental Biology
- **LS4** Physiology, Pathophysiology and Endocrinology
- **LS5** Neurosciences and Neural Disorders
- **LS6** Immunity and Infection
- **LS7** Diagnostic Tools, Therapies & Public Health
- **LS8** Evolutionary, Population and Environmental Biology
- **LS9** Applied Life Sciences and Biotechnology

Social Sciences and Humanities

- **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

Physical Sciences & Engineering

- **PE1** Mathematics
- **PE2** Fundamental Constituents of Matter
- **PE3** Condensed Matter Physics
- **PE4** Physical & Analytical Chemical Sciences
- **PE5** Synthetic Chemistry and Materials
- **PE6** Computer Science & Informatics
- **PE7** Systems & Communication Engineering
- **PE8** Products & Process Engineering
- **PE9** Universe Sciences
- **PE10** Earth System Science

Who evaluates ERC proposals?

- **At step 1**

- Panel members who discuss over several days
- E.g. there is an ERC 2017 AdG panel with 12 members

- *Balance between generalist + specialised reviews*
- *Careful treatment of interdisciplinary proposals*

- **At step 2**

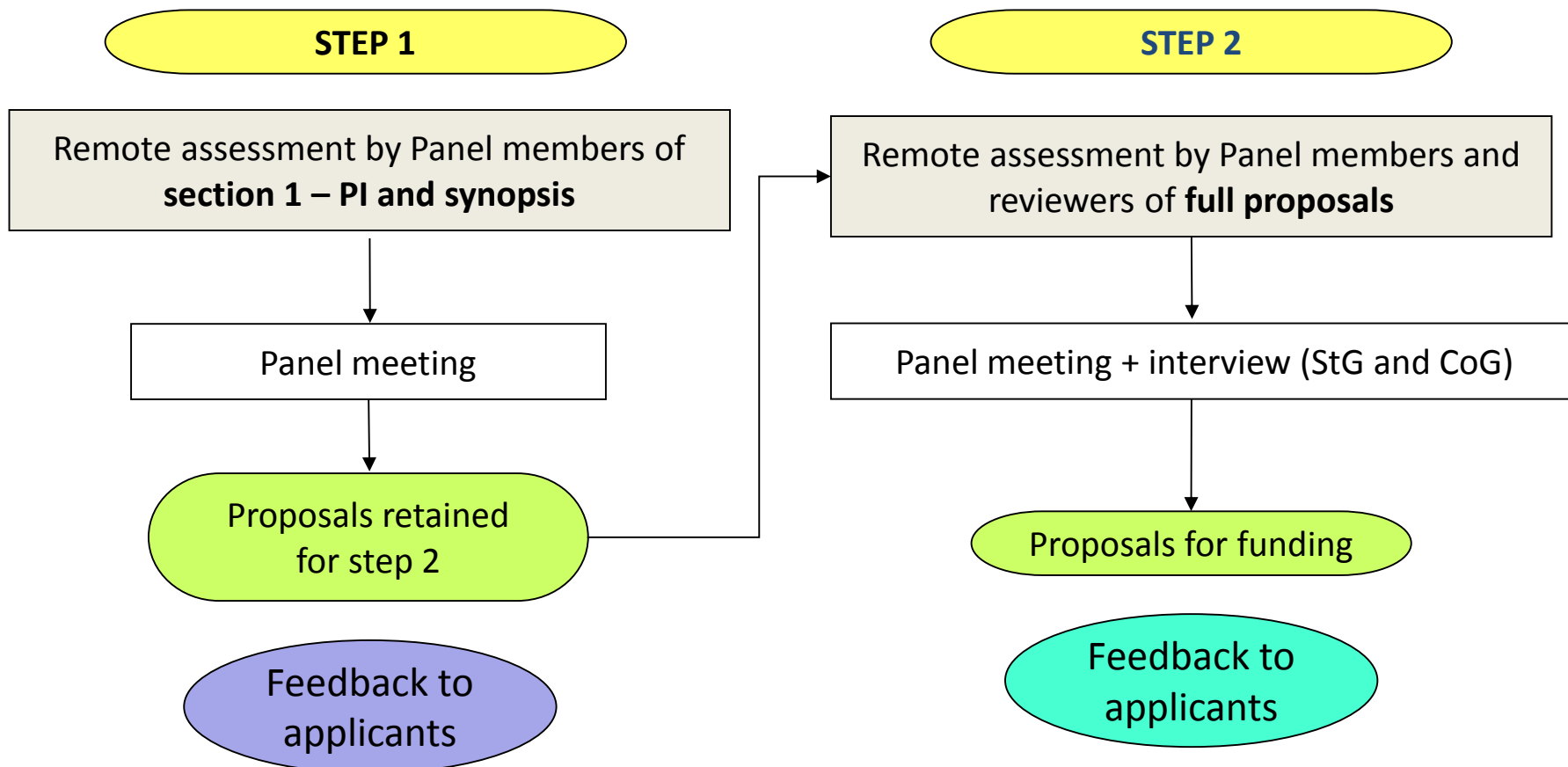
- Panel members plus
- typically 3 external (close) experts per proposal

Some 200 external reviewers per call per panel

We need you!

Submission, evaluation and selection

Starting, Consolidator and Advanced Grants

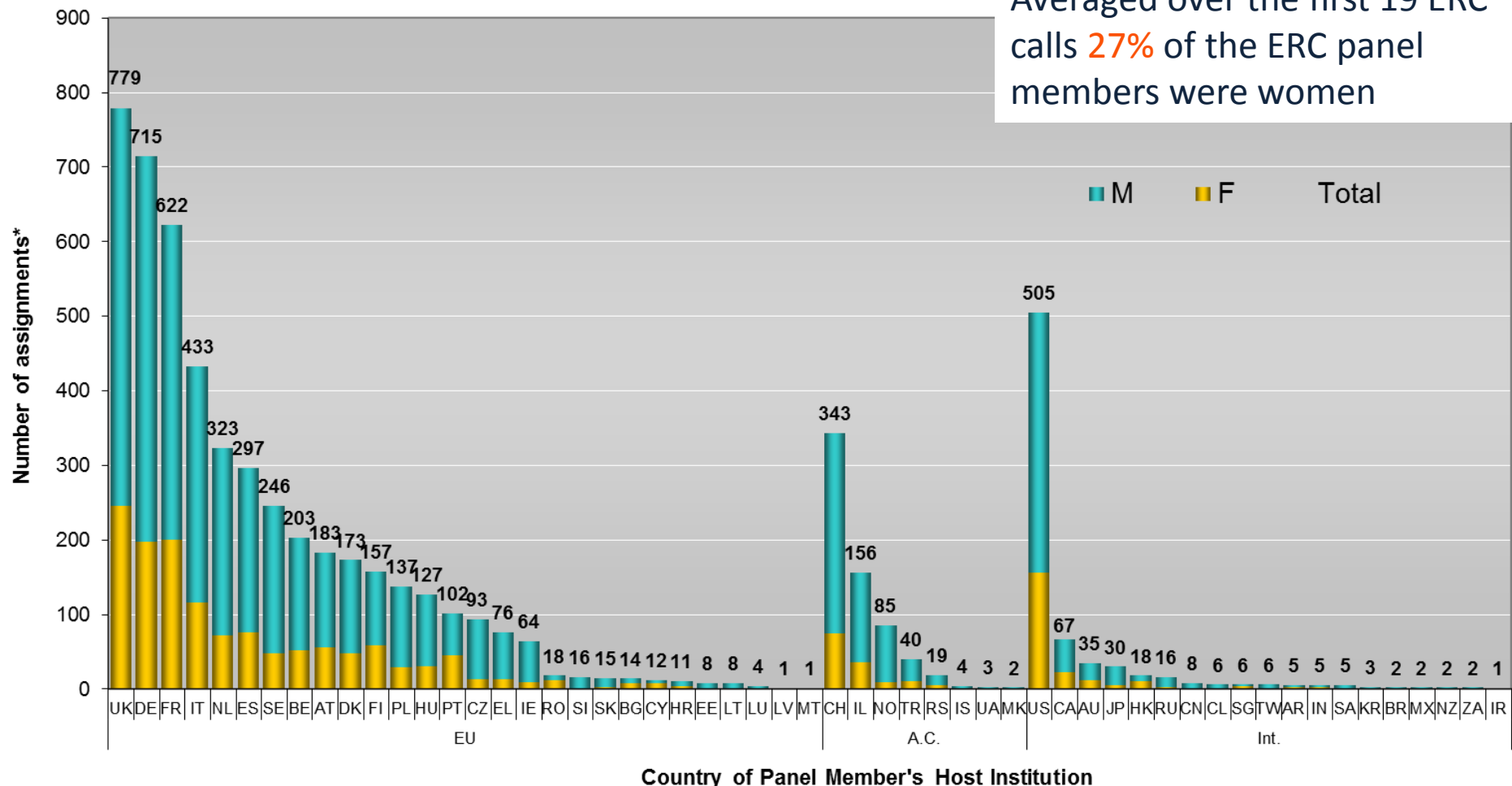


ERC Panel Members by Country of HI and Gender



European Research Council
Established by the European Commission

Averaged over the first 19 ERC calls 27% of the ERC panel members were women



Based on the ERC StG, CoG and AdG calls 2007 - 2015

Overview of 2018 ERC Calls



European Research Council
Established by the European Commission

| ERC calls | Budget | Call Opening | Submission Deadline(s) |
|---|------------------------|-----------------|------------------------|
| Starting Grant ERC-2018-StG | 581 M€ (391 grants) | 3 August 2017 | 17 October 2017 |
| Consolidator Grant ERC-2018-CoG | 550 M€ (287 grants) | 24 October 2017 | 15 February 2018 |
| Advanced Grant ERC-2018-AdG | 450 M€ (194 grants) | 15 May 2018 | 30 August 2018 |
| Synergy Grant ERC-2018-SyG | 250 M€ (30 grants) | 3 August 2017 | 14 November 2017 |

International collaboration

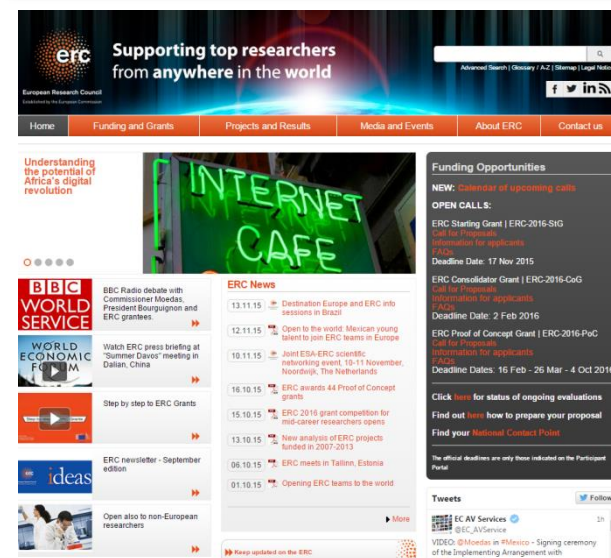
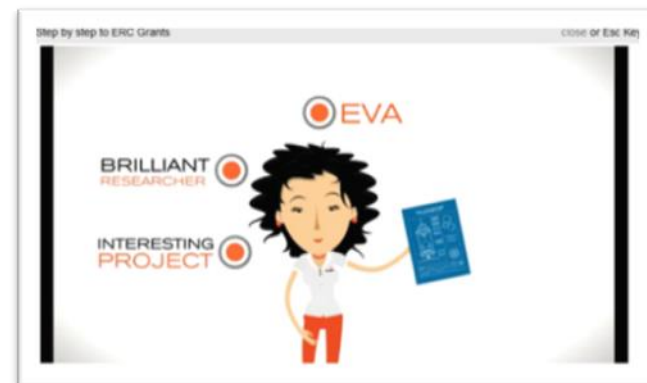
- ERC promotes international participation to its grants through special agreements with sister institutions.
- One such "implementing agreement" was signed with NSFC in 2015.
- Calls are launched in October.
- <https://erc.europa.eu/managing-your-project/set-and-develop-your-team>
- https://erc.europa.eu/sites/default/files/document/file/agreement_ERC_NSFC_en.pdf

Some useful tools and links






European Research Council
Established by the European Commission

- Read the **Work Programme and Information for Applicants**
- Contact your **National Contact Point** if you have questions
- View the **step-by-step video** Introduction to application process, including tips & tricks for the interview
https://erc.europa.eu/get_video/4009
- Consult **ERC website** for latest funding opportunities, view ERC funded projects



The European Research Council



- More information: erc.europa.eu
or watch: <https://player.vimeo.com/video/154715819>
- Sign up for news alerts: erc.europa.eu/keep-updated-erc
- Follow us on:
 -  www.facebook.com/EuropeanResearchCouncil
 -  twitter.com/ERC_Research
 -  www.linkedin.com/company/european-research-council

Thank you!

谢谢

ERC

Scientific Governance by the Scientific Council



Jean-Pierre
BOURGUIGNON



Klaus
BOCK



Mart
SAARMA



Núria
SEBASTIAN GALLÉS



Margaret
BUCKINGHAM



Christopher
CLARK



Athene
DONALD



Barbara
ENSOLI



Tomas
JUNGWIRTH



Matthias
KLEINER



Eva
KONDOROSI



Michael
KRAMER



Kurt
MEHLHORN



Barbara
ROMANOWICZ



Nils Christian
STENSETH



Martin
STOKHOF



Nektarios
TAVERNARAKIS



Janet
THORNTON



Isabelle
VERNOS



Reinhilde
VEUGELERS



Michel
WIEVIORKA



Fabio
ZWIRNER