

# The European Research Council

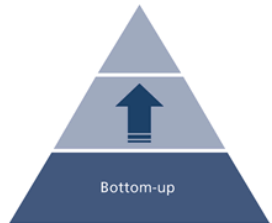


## The ERC: Funding Investigator Driven Frontier Research

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Vice President of ERC and Chair of the ERC  
Scientific Council Working Group on Widening  
European Participation  
**Tbilisi, Georgia, 20-21 April 2017**



# What is ERC?



The ERC supports excellence in frontier research through a bottom-up, individual-based, pan-European competition

**Budget:** € 13 billion (2014-2020) - 1.9 billion €/year  
€ 7.5 billion (2007-2013) - 1.1 billion €/year

## Legislation

- Scientific governance: independent Scientific Council with 22 members including the ERC President; full authority over funding strategy
- Support by the ERC Executive Agency (autonomous)
- Excellence as the only criterion

## Strategy

- Support for the individual scientist – no networks!
- No predetermined subjects (bottom-up)
- Support of frontier research in all fields of science and humanities
- Global peer-review

# 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

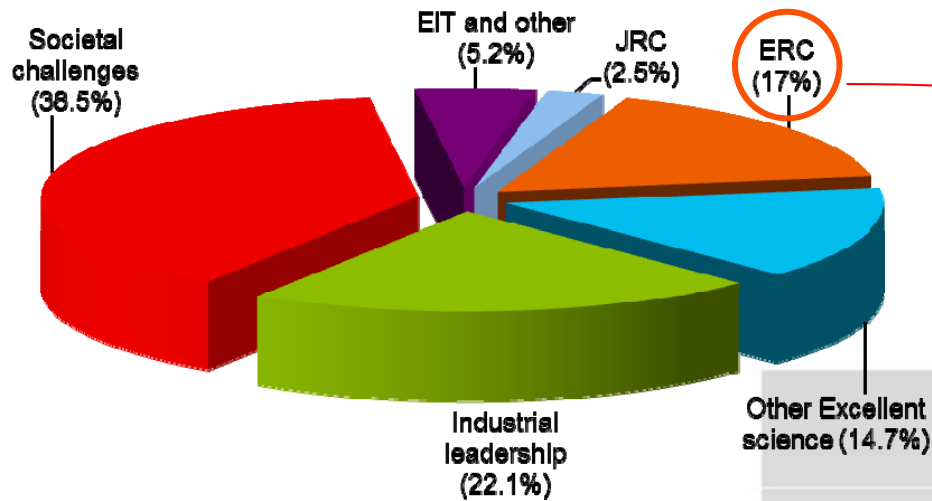
## ➤ Excellent Science:

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

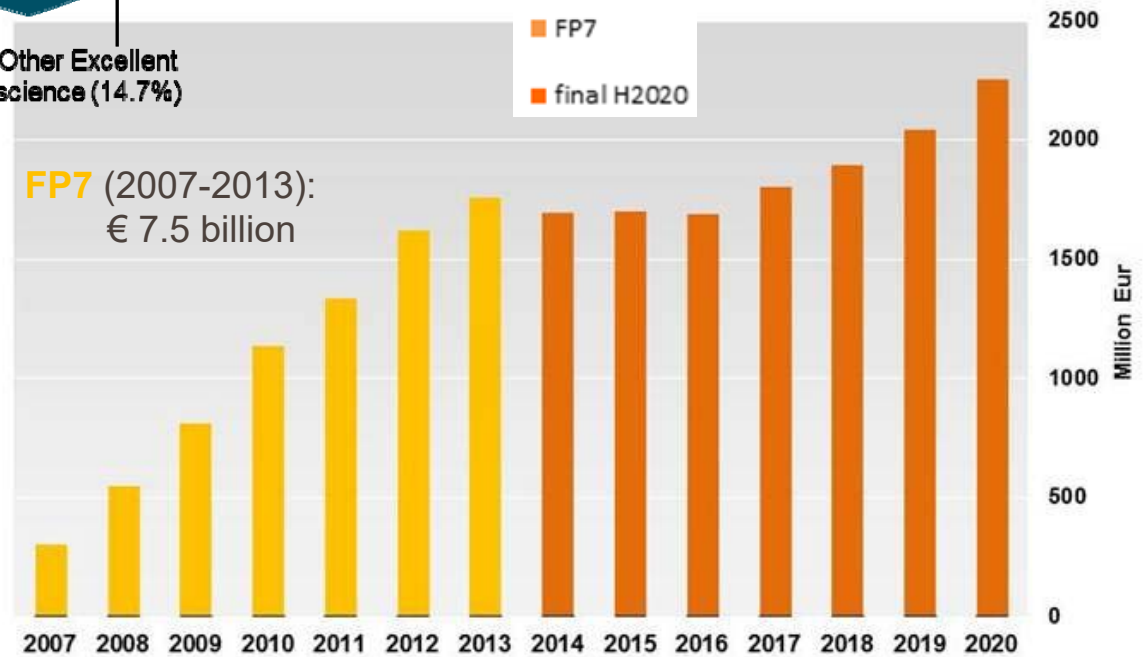
# ERC H2020 Budget



European Research Council  
Established by the European Commission



**ERC Budget  
€ 13 billion**



European Commission

Horizon 2020  
European Union funding  
for Research & Innovation

# What are the main ERC principles?

## 1 Principal Investigator (PI)

Independent researchers from anywhere in the world,  
of any age and career stage can apply

## 1 Host Institution

No consortia, no networks, no co-financing

Host institutions in one of the EU Member States or Associated countries

## 1 Research project

Applications can be made in any field of research, Life Sciences, Physical Sciences and Engineering and Social Sciences and Humanities

## 1 selection criteria: Excellence

# ERC Research project

## Evaluation of proposals: main features



- All fields of fundamental research: Physical Sciences & Engineering, Life Sciences, Social Sciences & Humanities
- Bottom-up: no predetermined subjects, no priorities
- High risk/high gain
- Goal of the evaluation: select the best frontier research proposals
- Only evaluation criteria: excellence
- Method: peer review

What makes ERC  
evaluation exceptional?



Peers  
Review procedure

# ERC Grant Schemes



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## Starting Grants

starters  
(2-7 years after PhD)  
up to € 2.0 Mio  
for 5 years

## Consolidator Grants

consolidators  
(7-12 years after PhD)  
up to € 2.75 Mio  
for 5 years

## Advanced Grants

track-record of  
significant research  
achievements in the  
last 10 years  
up to € 3.5 Mio  
for 5 years

## Proof-of-Concept

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

# ERC Research project Evaluation Panel Structure (WP2017)



## 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 Diagnostics, Therapies, Applied Medical Technology and Public Health
- LS8 Evolutionary, Population and Environmental Biology
- LS9 Applied Life Sciences and Non-Medical Biotechnology

## 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 Process Engineering
- PE9 Universe Sciences
- PE10 Earth System Science

## Social Sciences and Humanities

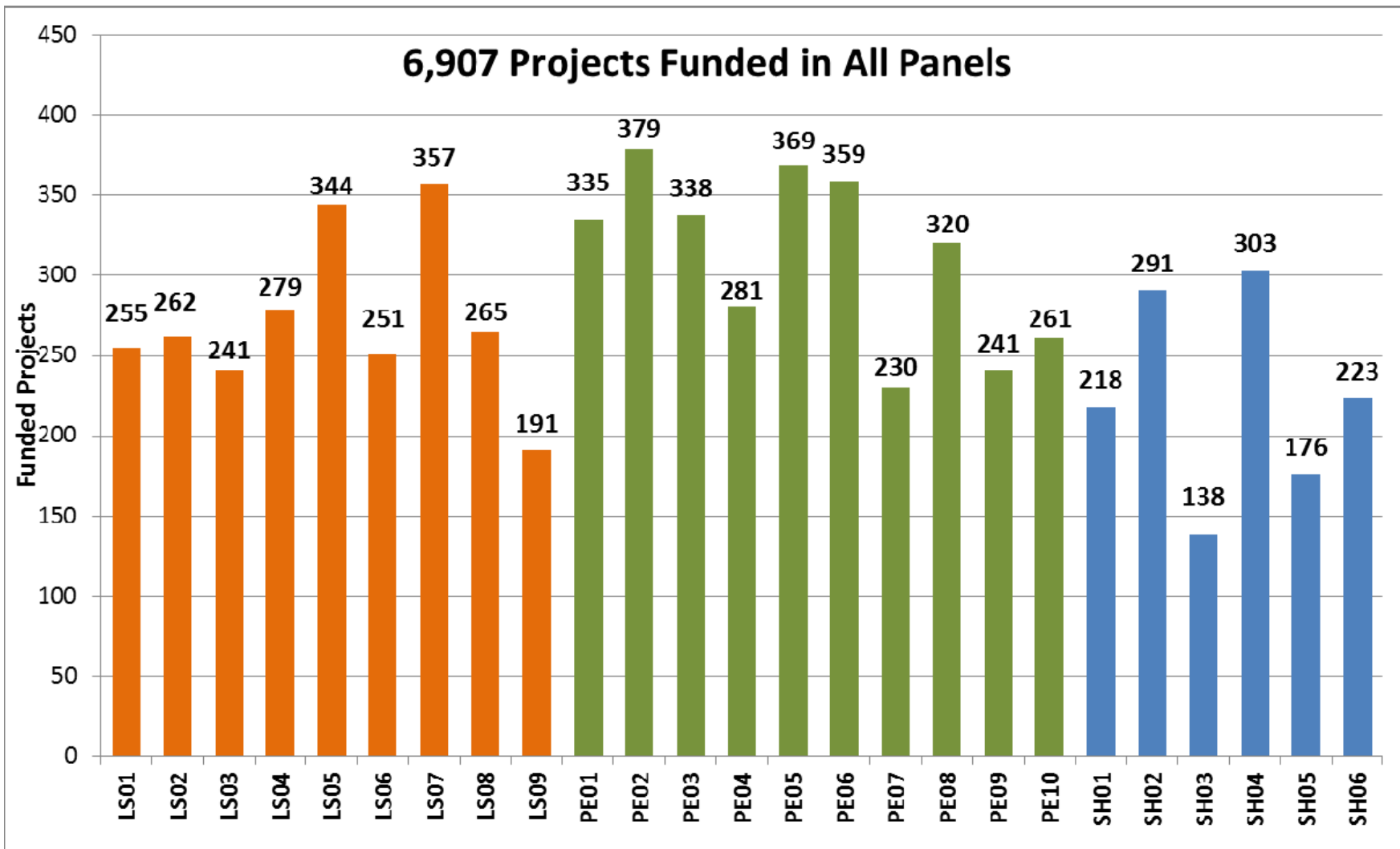
- SH1 Individuals, Markets and Organisations
- SH2 Institutions, Values, Environment and Space
- SH3 The Social World, Diversity, Population
- SH4 The Human Mind and Its Complexity
- SH5 Cultures and Cultural Production
- SH6 The Study of the Human Past



# ERC Research project Distribution of ERC Grants by Panel



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# Principal Investigator

## Substantial grants to the very best



### ➤ The Researcher (PI : Principal Investigator)

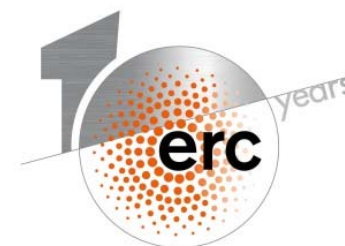
- ERC funds individual scientists
- Any nationality, age or current place of work in the world
- Starting, consolidator or advanced grant (depending on work experience and scientific achievements)

### ➤ Research team

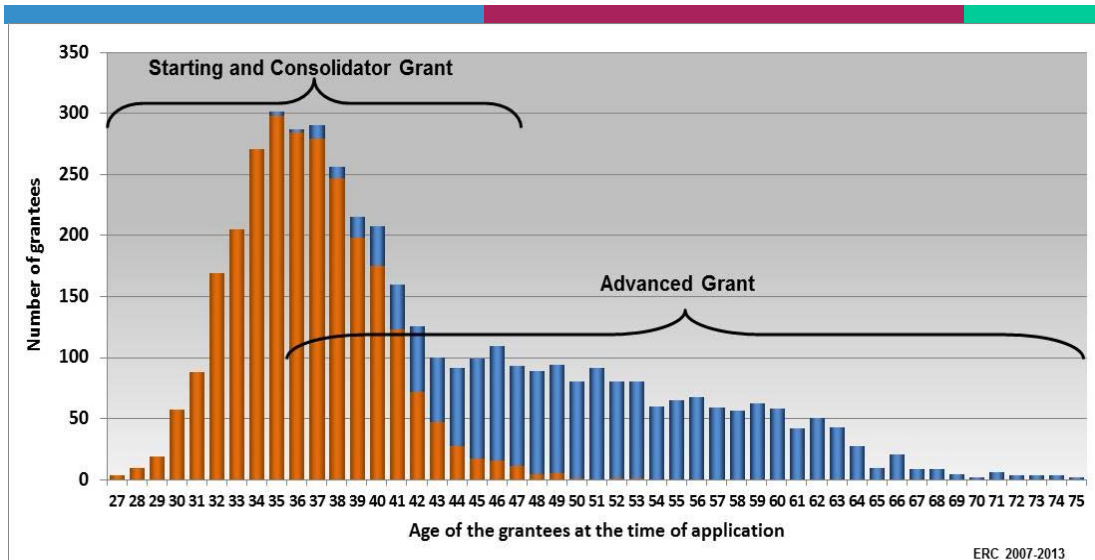
- The PI can choose national or trans-national team members if scientific added value proven
- The grant covers the salary of team members



# Principal Investigator Priority to Young Scientists

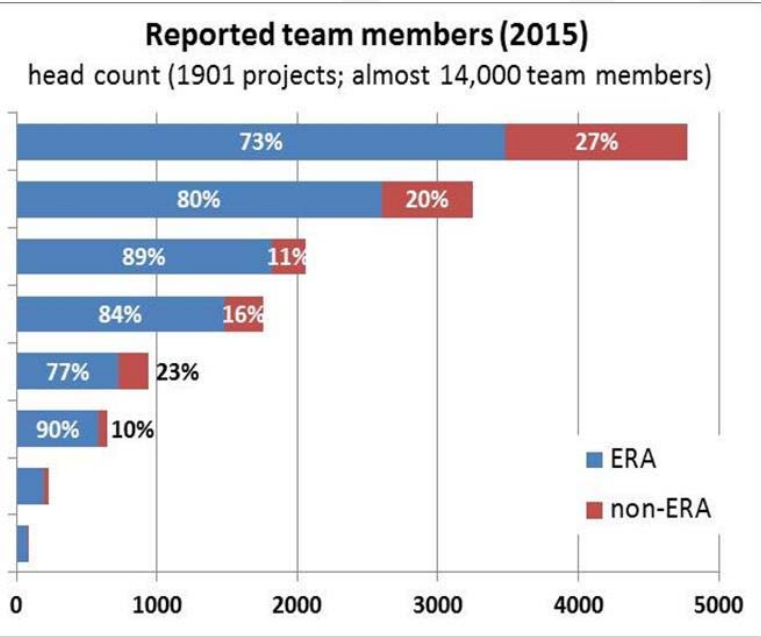


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+ 30 000 PhD and post-doc researchers working in ERC teams.

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



# ERC Starting Grants

## The Applicant's Profile



### *"Am I competitive enough?"*

- **Potential** for research **independence**
- Able to develop ground-breaking idea, think out of the box
- Evidence of scientific maturity & **creativity**
- At least one publication without participation of PhD supervisor

### *Promising track-record of early achievements*

- Significant publications, contribution to the field
- Invited presentations in conferences
- Funding, patents, awards, prizes

# ERC Advanced Grants

## The Applicant's Profile



### Already a leader in the field?

- Track-record of significant research achievements **in the last 10 years**
- Exceptional **leaders** and **mentors**
- 10 publications as senior author in major scientific journals
- 5 granted patents
- 10 invited presentations at international conferences
- 3 international conferences where PI was an organiser
- International prizes/awards

# Host Institution

## Substantial grants to fund frontier research



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### ➤ Host Institution (HI) in Europe and Associated Countries

- The one where the researcher already works, or any other institution based in EU or associated countries
- Universities, research centres; public or private
- Grantee must spend at least 50% of the work time in the HI ... but can keep affiliation with home institute outside Europe
- Grants are portable (= the PI can change Host Institution)
- No consortia, no co-funding
- 5 years projects

# Role of the Host Institution

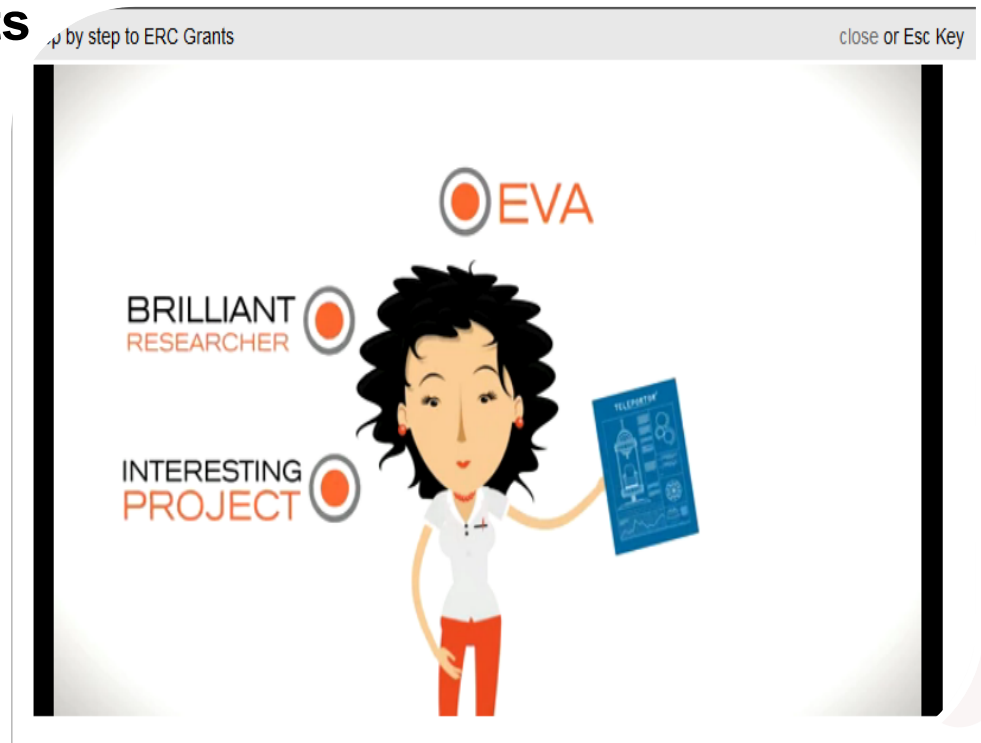


- Is committed to ensure that the PI may:
  - ✓ Apply for funding independently
  - ✓ Manage research and funding project
  - ✓ Publish independently as senior author
  - ✓ Have access to reasonable space and facilities
- Signs Grant Agreement
- Overhead: 25%

# How to Apply



- Read **Information for Applicants** and Work Programme
- **Animated** infographics clip
- Entertaining introduction to **application process**, including **tips & tricks** for the interview



Video: <https://vimeo.com/94179654>



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More information on

[erc.europa.eu](http://erc.europa.eu)

National Contact Point in your country

[erc.europa.eu/national-contact-points](http://erc.europa.eu/national-contact-points)

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**Thank you!**



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