The European Research Council

ERC and Greece
FP7 achievements and H2020 results

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ERCEA Head of Unit
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!
- Global peer-review
- No predetermined subjects (bottom-up)
- Support of frontier research in all fields of science and humanities
Established by the European Commission

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

ERC Budget € 13 billion
ERC Scientific Council Members
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 offers independence, recognition & visibility

- to work on a research topic of own choice, with a team of own choice
- to gain true financial autonomy for 5 years
- to negotiate with the host institution the best conditions of work
- to attract top team members (EU and non-EU) and collaborators
- to move with the grant to any place in Europe if necessary (portability of grants)
- to attract additional funding and gain recognition; ERC is a quality label
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

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 and Public Health
- LS8 Evolutionary, Population and Environmental Biology
- LS9 Applied Life Sciences and Non-Medical Biotechnology
How Are the Proposals Evaluated?

**STEP 1**
Remote assessment by Panel members of section 1, part B1: synopsis and PI

- Panel meeting
- Proposals rejected (score B & C)
- Proposals retained for step 2 (score A)

**STEP 2**
Remote assessment by Panel members and reviewers of full proposals: part B1 + B2

- Panel meeting StG & CoG: Interviews
- Ranked list of proposals (scores A & B)

Feedback to applicants

Redress
Averaged over the first 19 ERC calls 27% of the ERC panel members were women
ERC Work Programme timeline

Scientific Council fixes orientations on WP

Scientific Council finalises WP

Commission adopts WP and calls are published

Evaluations start

- December Year N - 2
- March Year N - 1
- July Year N
<table>
<thead>
<tr>
<th>Year</th>
<th>Date</th>
<th>Change Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>28/07/15</td>
<td>Restrictions on submissions eased (for applicants receiving “B” scores at step 2). Additional restriction on submissions introduced for applicants who have been rejected on the grounds of a breach of research integrity.</td>
</tr>
<tr>
<td>2015</td>
<td>22/07/14</td>
<td>Extension of the restrictions on submissions based on the results of the 2014 calls applied. Removal of indicative domain budgets.</td>
</tr>
<tr>
<td>2014</td>
<td>10/12/13</td>
<td>Extension of the restrictions on submissions from 2015 based on the results of the 2014 calls announced. SyG under review.</td>
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</table>
WP 2017 main changes

**Frontier research grants**

- To increase proportion of funding for StG to try to achieve more equal success rates between StG and CoG.

- For the first time under Horizon 2020, beneficiaries of ERC frontier research grants funded under WP 2017 will automatically be covered by the provisions on research data sharing as set out in Article 29.3 of the ERC Model Grant Agreement unless they specifically decide to opt-out.
WP 2017 main changes

**Frontier research grants**

- Highlight need to take all measures to promote equal opportunities between men and women and aim for a gender balance of personnel assigned to the action.

- For maternity, the effective elapsed time since the award of the first PhD will be considered reduced by 18 months or if longer by the documented amount of leave actually taken for each child born before or after the PhD award.
WP 2017 other actions

• Continued qualitative evaluation of completed projects
ERC ACHIEVEMENTS
After 9 Years, a Success Story

Over 6,000 top researchers funded since the ERC’s creation in 2007

Over 40,000 researchers and other professionals employed in ERC research teams

€13 billion ERC budget for 2014-2020 under Horizon 2020

Over 90,000 articles from ERC projects published in prestigious scientific journals

677 research institutions hosting ERC grantees – universities, public or private research centres in the EU or associated countries

67 nationalities of grant holders
Priority to Young Scientists

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

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

- 71% of the first 200 completed ERC-funded projects made scientific breakthroughs and major advances in science (as judged by panels of peer reviewers)
- 7% of the ERC-acknowledging publications were among the top 1% most cited in their scientific field and publication year
- 20% of completed LS and PE projects reported at least one patent (on average 2 patents reported per project)
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-ERA: 17%
unknown: 2%

In all ERC grants
+ 7,500 non-ERA team members
most from
China, US, India, and Russia
The Nobel Prize in Physiology or Medicine 2014 was awarded to May-Britt Moser and Edvard Moser, together with John O'Keefe, "for their discoveries of cells that constitute a positioning system in the brain".

The research leading to these discoveries* was supported by FP5.

*) "Spatial Representation in the Entorhinal Cortex", Science, 2004

The Nobel Prize in Economic Sciences 2014 was awarded to Jean Tirole "for his analysis of market power and regulation".

- 2 other ERC grantees received the Nobel prize in 2010 and 2012
- Other 6 ERC grantees were already Nobel laureates at the moment they received the ERC grant
ERC AND GREECE
Established by the European Commission

Evaluated ERC Proposals by HI Country

1247 evaluated proposals from researchers applying with a Host Institution in Greece
FP7 ERC Grants versus Top Publications

4,354 Starting, Consolidator and Advanced grants awarded by ERC during FP7
36 ERC grants in Greece in FP7

*) Host institution refers to the current host organisation of the grant; data as of 27/04/2016
H2020 ERC Funded Projects by Country of HI

5 ERC grants in Greece in H2020
Success Rate by Country of HI

Success rate (2007-2015)

EU15

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<tr>
<th>Country</th>
<th>Success Rate</th>
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<td>FR</td>
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<tr>
<td>NL</td>
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<td>DE</td>
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<tr>
<td>UK</td>
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<td>AT</td>
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<td>BE</td>
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EU13

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<td>IL</td>
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<td>IT</td>
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<tr>
<td>IS</td>
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<td>TR</td>
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<td>RS</td>
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FP7 ERC
Grant Distribution vs. R&D Expenditure
ERC Proof of Concept

5 ERC PoC grants in Greece
FP7 – H2020 ERC Calls
Host Institutions in Greece

Current Host Institutions (data as of 27/04/2016)
Grantees at Home and Abroad

1 foreign grantee in Greece
40 Greek grantees in Greece
60 Greek PIs abroad in UK(24), CH(14), DE(10) …
Greek ERC grantees outside Greece

<table>
<thead>
<tr>
<th>Greek PIs applying with a HI outside Greece</th>
<th>evaluated</th>
<th>grantees</th>
<th>s.rate</th>
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<tr>
<td>resident in Greece</td>
<td>41</td>
<td>4</td>
<td>10%</td>
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<tr>
<td>resident in other ERA countries</td>
<td>502</td>
<td>53</td>
<td>11%</td>
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<tr>
<td>resident outside ERA</td>
<td>12</td>
<td>2</td>
<td>17%</td>
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<tr>
<td>Total</td>
<td>555</td>
<td>59</td>
<td>11%</td>
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<th>grantees</th>
<th>s.rate</th>
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<td>resident in Greece</td>
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<tr>
<td>resident in other ERA countries</td>
<td>23</td>
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<td>4%</td>
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<tr>
<td>resident outside ERA</td>
<td>47</td>
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<tr>
<td>Total</td>
<td>1194</td>
<td>41</td>
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<table>
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<th>Host institution</th>
<th>Greek PIs</th>
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<td>ETH Zurich</td>
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<tr>
<td>University of Oxford</td>
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<tr>
<td>Imperial College</td>
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<tr>
<td>University of Cambridge</td>
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<td>CNRS</td>
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<tr>
<td>University of Geneva</td>
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<tr>
<td>University College London</td>
<td>3</td>
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<tr>
<td>Other</td>
<td>26</td>
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<tr>
<td>TOTAL</td>
<td>60</td>
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