Los proyectos ERC en el marco del Horizonte 2020

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Research officer
Scientific Department

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Outline

- ERC : Main Features
- Preparing an application
- Evaluation Process
- ERC and H2020
- Statistics
What is ERC?

Autonomous funding body set up by the EU in 2007 and led by scientists funding projects with:

- 1 researcher: Any nationality, age or current place of work in the world
- No thematic priorities and all fields of science and humanities
- No consortia: 1 Host Institution (in Europe)
- International, top level peer-review
ERC basics

- The Principal Investigator and the Research team
  - The PI can choose national or trans-national team members if scientific added value proven
  - The grant covers salaries (PI and team members)

- Frontier research project
  - High risk/high gain
  - Until 5 years projects

- Host Institution
  - The one where the researcher already works, or any other institution established in the EU or associated countries
  - Grants are portable (the PI can change Host Institution)
  - Universities, public or private research centres.
ERC Grant schemes

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

Consolidator Grants
(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 Panel Structure

Life Sciences
- LS1 Molecular & Structural Biology & Biochemistry
- LS2 Genetics, Genomics, Bioinformatics & Systems Biology
- LS3 Cellular and Developmental Biology
- LS4 Physiology, Pathophysiology & Endocrinology
- LS5 Neurosciences & neural disorders
- LS6 Immunity & infection
- LS7 Diagnostic tools, therapies & public health
- LS8 Evolutionary, population & environmental biology
- LS9 Applied life sciences & biotechnology

Social Sciences and Humanities
- SH1 Individuals, institutions & markets
- SH2 Institutions, values, beliefs and behaviour
- SH3 Environment, space and population
- SH4 The Human Mind and its complexity
- SH5 Cultures & 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 Materials & Synthesis
- PE6 Computer science & informatics
- PE7 Systems & communication engineering
- PE8 Products & process engineering
- PE9 Universe sciences
- PE10 Earth system science
Call budget distribution for 2014 calls

Breakdown per domain

• PE : Physical Sciences & Engineering
• LS : Life Sciences
• SH : Social Sciences & Humanities

→ Within each domain, **budget is broken down according to total funding requested per panel** (equal chance in each panel)

<table>
<thead>
<tr>
<th>Funding rates:</th>
</tr>
</thead>
<tbody>
<tr>
<td>100% of eligible direct costs</td>
</tr>
<tr>
<td>+ 25% indirect costs</td>
</tr>
</tbody>
</table>
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New 2014 Resubmission restrictions

- Increasing number applications causes low success rates and high panel workload
- Currently 2013 applicants who received "C" at step 1 cannot resubmit in 2014
- For 2014 applicants, tighter resubmission rules:
  - B (Step 1 or Step 2): will have to wait out one year
  - C (Step1): will have to wait out two years
Established by the European Commission
New 2014 (2)

Eligibility rules for MDs
Simplified budget table (Administrative submission forms and part B)
Ethics table: part A of the online submission forms
Funding ID – changed format
Model CVs provided (Guide for applicants)
Reason for exclusion of reviewers – not required
Possibility to provide a Researcher ID (e.g. ORCID) in A- and B-forms
Interdisciplinary projects: justification paragraph in part B1
Changes in the panel descriptors for all SH panels (please see the WP and the GfA)
Online Submission
Please do consult the latest Guide for Applicants

<table>
<thead>
<tr>
<th>PART A</th>
<th>online forms</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Proposal &amp; PI info</td>
</tr>
<tr>
<td></td>
<td>Host institution info</td>
</tr>
<tr>
<td></td>
<td>Budget</td>
</tr>
<tr>
<td></td>
<td>Ethic table</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Annexes – submitted as .pdf</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statement of support of HI</td>
</tr>
<tr>
<td>Copy of PhD or equiv. (only StG &amp; CoG)</td>
</tr>
<tr>
<td><em>If applicable:</em></td>
</tr>
<tr>
<td>• Document for extension of eligibility window (StG &amp; CoG)</td>
</tr>
<tr>
<td>• Ethics self-assessment</td>
</tr>
<tr>
<td>• Other documents (maternity leave..)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PART B1 – submitted as .pdf</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 1: Extended synopsis and PI</td>
</tr>
<tr>
<td>Extended synopsis of project 5 p.</td>
</tr>
<tr>
<td>CV 2 p.</td>
</tr>
<tr>
<td>Track record 2 p.</td>
</tr>
<tr>
<td>Funding ID</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PART B2 – submitted as .pdf</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 2: Scientific proposal 15 p.</td>
</tr>
</tbody>
</table>
# Ethics table:
Part of Online Submission Forms

<table>
<thead>
<tr>
<th>4 - Ethics</th>
</tr>
</thead>
</table>

### 4.11 HUMAN EMBRYOS/FOETUS

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does your research involve Human Embryonic Stem Cells (hESCs)?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does your research involve the use of human embryos?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does your research involve the use of human foetal tissues / cells?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 4.12 HUMANS

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does your research involve human participants?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does your research involve physical interventions on the study participants?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If your research involves processing of genetic information, please go to the section “Protection of personal data”.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 4.13 HUMAN CELLS / TISSUES

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does your research involve human cells or tissues? (if human embryos/foetus, go to the section “Human Embryos/Feotus”)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 4.14 PROTECTION OF PERSONAL DATA

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does your research involve personal data collection and/or processing?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does your research involve further processing of previously collected personal data (secondary legal)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Preparing an application (1)

• Register early, get familiar with the system and templates and start filling in the forms.
• Have all your documentation ready in time.
• Follow the formatting rules and page limits.
• Proof-read the proposal well.
Preparing an application (2)

- Check coherency of figures, justify requested resources and involvement of team members
- Submit your proposal and relevant annexes well in advance before the deadline to avoid last minute errors
- A submitted proposal can be revised until the call deadline by submitting a new version and overwriting the previous one.
Guidelines and Other Resources

• Read the Guide for Applicants and the Ideas Work Programme.

• Any doubts about your eligibility or any other questions, contact one of the NCPs or the ERCEA.

• Have a look at what is already funded and the profile of the grantees.
Menu allows to search ERC projects by Funding Scheme, Call year and Country of Host Institution
Outline

- ERC : Main Features
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Submission, evaluation and selection

1. Submission of full proposals (strict deadline!)
2. Eligibility check (PI, HI, submission restrictions)
3. Step 1 (remote) evaluation on the basis of PI and synopsis (part B1)
4. 1st Panel meeting
5. Proposals passing to step 2
6. Individual assessment of full proposals by panel members & remote referees
7. AdG: 2nd Panel meeting
8. StG, CoG: 2nd Panel meeting incl. interviews of applicants
9. Consolidation of 3 main domains rank lists
10. Proposals selected for funding based on call budget
11. Feedback to applicants
12. Ethics Review
13. Redress
Eligibility

Most common Ineligibility Reasons:

- Submission after the deadline.
- Incomplete proposals.
- No commitment letter from the HI.
- PhD award date outside the window.
- Multiple-submission (only one application per PI under the same WP).
Evaluation Criteria

Excellence as sole criterion, to apply to:

1. Quality of the research project
   Ground-breaking nature of the research: Important challenge? Substantially beyond the current state of art? High-gain/high-risk balance
   Know your competitors – what is the state of play and why is your idea and scientific approach outstanding?
   Potential impact: Possibility of a major break-through?
   Scientific Approach: Feasibility, novel concepts/methodology

2. Principal Investigator
   Intellectual capacity and creativity: Track-record, capacity to go significantly beyond the state of the art, evidence of creative independent thinking
   Commitment: Willing to devote a significant part of PI's working time *(minimum of 50% for Starting and Consolidator Grant, 30% for Advance Grant. For all, minimum of 50% in Europe)*

StG and CoG: Importance of the interview
Who evaluates the proposals?

- **Panel members**: typically 400 / call
  - High-level scientists
  - Recruited by ScC from all over the world
  - About 14 members plus a chair person

- **Referees**: typically 2000 / call
  - Evaluate only a small number of proposals
  - Similar to normal practise in peer-reviewed journals
Reviewer Exclusion

• Applicants can nominate up to three persons to be excluded from the evaluation of their proposal, specifying:
  o Name
  o Institution, City, Country
  o Webpage

• The concerned persons will be excluded from the evaluation of the proposal assuming that the ERCEA is still in a position to evaluate the proposal properly.
# Feedback to Applicants

## End of Step 1:

<table>
<thead>
<tr>
<th>A</th>
<th>Proposal is of sufficient quality to pass to Step 2 of the evaluation.</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Proposal is of high quality but not sufficient to pass to Step 2 of the evaluation. The applicant may also be subject to resubmission limitations in the next call(s).</td>
</tr>
<tr>
<td>C</td>
<td>Proposal is not of sufficient quality to pass to Step 2 of the evaluation. The applicant may also be subject to resubmission limitations in the next call(s).</td>
</tr>
</tbody>
</table>
Feedback to Applicants

End of Step 2:

| A | Proposal fully meets the ERC's excellence criterion and is recommended for funding if sufficient funds are available. |
| B | Proposal meets some but not all elements of the ERC's excellence criterion and will not be funded. The applicant may also be subject to resubmission limitations in the next call(s). |

At the end of both steps applicants will be told the **ranking range** of their proposal out of the proposals evaluated by the panel.
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ERC in H2020

FP7 budget € 50.5 billion

H2020 budget € 77 billion
€ 13.1 billion
ERC in H2020
2014 – 2020 budget
2014 : Indicative planning

<table>
<thead>
<tr>
<th>ERC calls</th>
<th>Budget</th>
<th>Call Publication</th>
<th>Submission Deadlines</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Starting Grants</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ERC-2014-StG</td>
<td>485 M€</td>
<td>11 December 2013</td>
<td>27 March 2014</td>
</tr>
<tr>
<td><strong>Consolidator Grants</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ERC-2014-CoG</td>
<td>713 M€</td>
<td>11 December 2013</td>
<td>20 May 2014</td>
</tr>
<tr>
<td><strong>Advanced Grants</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ERC-2014-AdG</td>
<td>450 M€</td>
<td>17 June 2014</td>
<td>21 October 2014</td>
</tr>
<tr>
<td><strong>Proof of Concept</strong></td>
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Some take-home messages

ERC awards are:

- **Very competitive**: ~10% success rates
- **Significant**: €1.5 Mio – €3.5 Mio
- **Bottom-up**: open to any topic
- **Ambitious**: achieve/boost independence; form a group
- Looking for **High-risk/High-gain research**
- **Flexible**: distribution of budget can be changed
- **Portable**: can be moved anywhere in Europe
- **Prestigious**: will boost a research career
PANELS 5 AND 6 CONNECTED WITH CULTURAL HERITAGE

SH5 Cultures and Cultural Production: Literature, philology, cultural studies, arts, philosophy

SH5_1 Classics, ancient literature and art
SH5_2 Theory and history of literature, comparative literature
SH5_3 Philology and palaeography
SH5_4 Visual and performing arts, design, arts-based research
SH5_5 Music and musicology; history of music
SH5_6 History of art and architecture
SH5_7 Museums, exhibitions, conservation and restoration
SH5_8 Cultural studies, symbolic representation, religious studies
SH5_9 Transregional studies
SH5_10 Cultural heritage, cultural identities and memories
SH5_11 Philosophy and history of philosophy

- 30 -
Study of the Human Past: Archaeology and history

SH6_1 Historiography, theory and methods of history
SH6_2 Archaeology, archaeometry, landscape archaeology
SH6_3 Prehistory, palaeoanthropology, palaeodemography
SH6_4 Ancient history
SH6_5 Medieval history
SH6_6 Early modern history
SH6_7 Modern and contemporary history
SH6_8 Colonial and post-colonial history
SH6_9 Global history, transnational history, comparative history, entangled histories
SH6_10 Social and economic history
SH6_11 Gender history, history of collective identities and memories
SH6_12 History of ideas, intellectual and cultural history
SH6_13 History of science and technology
Spain at ERC. Results of the 7FP

<table>
<thead>
<tr>
<th>Domain</th>
<th>Success Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>LS</td>
<td>6%</td>
</tr>
<tr>
<td>PE</td>
<td>7%</td>
</tr>
<tr>
<td>SH</td>
<td>7%</td>
</tr>
<tr>
<td>All</td>
<td>7%</td>
</tr>
</tbody>
</table>

Success rates per domain.
GRACIAS

More information on
http://erc.europa.eu

subscribe to the ERC newsletter
http://erc.europa.eu/keep-updated-erc

National Contact Points