H2020 Pillar “Excellent Science”

- The European Research Council (ERC)
- Future and emerging technologies (FET)
- Marie Skłodowska-Curie Actions
- Research infrastructure
The ERC's mission is to encourage the highest quality research in Europe through competitive funding and to support investigator-driven frontier research across all fields, on the basis of scientific excellence.

The term 'frontier research' reflects a new understanding of basic research. On one hand it denotes that basic research in science and technology is of critical importance to economic and social welfare. And on the other that research at and beyond the frontiers of understanding is an intrinsically risky venture, progressing in new and the most exiting research areas and is characterised by the absence of disciplinary boundaries.
## Granting system

<table>
<thead>
<tr>
<th>Specific eligibility criteria</th>
<th>Starting Grant</th>
<th>Consolidator Grant</th>
<th>Advanced Grant</th>
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<tbody>
<tr>
<td>Principal Investigator shall have been awarded his/her first PhD</td>
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<td>Principal Investigator shall have been awarded his/her first PhD</td>
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<td>prior to the publication date of the call for proposals of the ERC Starting Grant</td>
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<td>prior to the publication date of the call for proposals of the ERC Consolidator Grant</td>
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- **Grant size:** up to € 2 million
- **up to € 2.75 million**
- **up to € 3.5 million**

- Proof of Concept grants up to € 150 000 per grant
Some figures about ERC granting system

- program started in 2007
- 5000 grants awarded
- budget year 2014: €1.7 billion

Consolidator Grant 2014

- Call Budget: €585 M€
- 2051 proposals (19% decrease compared to CoG 2014)
- Domain Budgets:
  - PE: 47% (~275 M€)
  - LS: 32% (~188 M€)
  - SH: 21% (~121 M€)

Budget is divided among the panels based on requested funding
ERC Principles:

Excellence - sole evaluation criterion

Evaluation of the *scientific 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
One-step submission procedure / Two-step evaluation process

Step 1
- remote evaluation of short proposal by 4 Panel Members, acting as generalists, + members of other relevant Panels
- panel meeting

classification in three categories: A B C

A projects go to Step 2

Step 2
- remote evaluation of the full proposal by 4 Panel Members + 5 external experts
- interview (30 minutes)
Criterion 1: Research Project

Ground-breaking nature and potential impact of the research project

• To what extent does the proposed research address important challenges?
• To what extent are the objectives ambitious and beyond the state of the art (e.g. novel concepts and approaches or development across disciplines)?
• To what extent is the proposed research high risk/high gain?

Scientific Approach

• To what extent is the outlined scientific approach feasible bearing in mind the extent that the proposed research is high risk/high gain?

• To what extent is the proposed research methodology appropriate to achieve the goals of the project?
• To what extent does the proposal involve the development of novel methodology?
• To what extent are the proposed timescales and resources necessary and properly justified (based on the full Scientific Proposal)?
Criterion 2: Principal Investigator

- To what extent has the PI demonstrated the ability to propose and conduct ground-breaking research?
- To what extent does the PI provide evidence of creative independent thinking?
- To what extent have the achievements of the PI typically gone beyond the state of the art?

- To what extent does the PI demonstrate the level of commitment to the project necessary for its execution and the willingness to devote a significant amount of time to the project (min 50% of the total working time on it and min 50% in an EU Member State or Associated Country)?
Evaluation parameters on Criterion 2: Principal Investigator

no specific criteria/guidelines:
- scientific production
  - bibliometric parameters
  - independency from PhD supervisor
- international visibility
  - invited talks
  - scientific meeting organization
  - editorial board
- project management capabilities
- leading capabilities
  - PhD / postDoc supervising experience
Suggerimenti(?)

• provarci (se “requisiti minimi” di qualificazione scientifica)
  CoG 2014: P??: 74 proposte ➔ 12 progetti finanziati (≈16%)

• partire da una idea
  innovativa, rilevante, fattibile

• individuare il/i panel “giusti”, indicare keyword “opportune”
• evidenziare gli aspetti oltre lo stato dell’arte, la natura “ground-breaking” e l’impatto potenziale della ricerca
• dimostrare di essere in grado di portare avanti la ricerca in maniera indipendente
• indicare indicatori bilbiometrici (h-index, num tot di citazioni, IF)

PS. la sede della ricerca non viene giudicata