The Return of Synergy Grants
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Quick ERC overview

Outcome of the 2012-2013 Synergy pilot scheme assessment

Overview of the re-launched Synergy 2018 grant scheme
ERC is….
1. funding: it is part of H2020

For 2017, the budget is almost 1.8 billion euros, the highest ever since the beginning of the ERC.

ERC Budget
€ 13 billion
ERC is....

2. the Scientific Council

The ERC Scientific Council
• 22 prominent researchers appointed by the Commission
• Establishes overall scientific strategy
• Controls quality of operations and management
• Ensures communication with the scientific community

Panel Members
• Appointed by the Scientific Council
• Full independence in the evaluation and ranking of the proposals
• Appoint remote referees
ERC is…

3. the ERCEA

The ERC Executive Agency

- Implements calls for proposals
- Organises peer review evaluation
- Establishes and manages grant agreements
- Administers scientific and financial aspects
- Carries out communications activities

ERC Scientific Officers

- Work closely with the panel members
- Manage all practical aspects of the evaluations
- Carry out scientific follow-up
ERC basics

INDIVIDUAL RESEARCHERS FROM ALL OVER THE WORLD
LONG TERM GRANTS
TO HIGH-RISK/HIGH-GAIN PIONEERING PROJECTS
IN ANY FIELD OF FRONTIER RESEARCH

Life Sciences

Physical Sciences and Engineering

Social Sciences and Humanities
ERC Funding Schemes

Starting Grants
starters
(2-7 years after PhD)
up to € 1.5 M
for 5 years

Consolidator Grants
consolidators
(7-12 years after PhD)
up to € 2 M
for 5 years

Advanced Grants
track-record of
significant research
achievements in the
last 10 years
up to € 2.5 M
for 5 years

Synergy Grants
Re-launched 2018
(2-4 PIs at STG, COG
or ADG stage)
up to € 10 Mio
for 6 years

Proof-of-Concept
bridging gap between research - earliest
stage of marketable innovation
up to €150,000 for ERC grant holders
Why should one apply for an ERC grant?

ERC offers independence, recognition & visibility

• research topic of **own choice**, with a team of **own choice**
• true **financial autonomy** for 5 years
• negotiate with the host institution the **best conditions** of work
• attract **top team members** (EU and non-EU) and collaborators
• **portability of grants** within Europe
• attract additional funding
The European Research Council

- Quick ERC overview
- Outcome of the 2012-2013 Synergy pilot scheme assessment
- Overview of the re-launched Synergy 2018 grant scheme
Background

• 2012-2013: two pilot Synergy Grant calls
  \(\Rightarrow\) 1.5 & 3% success rate: 24 projects selected
• 2014: the ad-hoc Synergy Working Group of the Scientific Council decided to assess the pilot funding scheme
  \(\Rightarrow\) Assessment report delivered – December 2015
• 2016: the Scientific Council decided to re-launch the scheme
  \(\Rightarrow\) Implementation: 2018 Work Programme
Synergy Grant Assessment Report

• Synergy Grant scheme would be a valuable addition to the current ERC frontier schemes because of:
  ➔ Its high international recognition - putting European research on the global map, often in leading position;
  ➔ The highly ambitious research goals it will trigger – that cannot be achieved by a single PI;
  ➔ The complementarity of PIs/teams it favours;
  ➔ The cross-fertilisation of disciplines and signs of new fields emerging it generates;
  ➔ The close collaboration it triggers which goes much beyond any regular EU framework collaborative project.
• It was noted that:
  ➔ 'Seed' effects are visible: expanding the fields and attracting further funding
  ➔ Early career scientists team members are broadening their expertise and opportunities
  ➔ Increased and/or unconventional collaborations between institutions are emerging
  ➔ Synergy grants – are perceived as the most prestigious ERC grant
SYG 2012 versus SYG 2013

**Synergy 2012** - 710 submitted proposals

- 11 proposals selected for funding (5 PE, 4 LS, 2 SH)
- 38 PIs (10 nationalities)
- 20 Host Institutions (7 countries)
- Success rate: 1.5%
- Average budget requested: €11.5m

**Synergy 2013** – 449 submitted proposals

- 13 proposals selected for funding (6 PE- 5 LS- 2 SH)
  (highly interdisciplinary)
- 45 PIs (14 nationalities)
- 38 institutions (12 countries)
- Success rate: 3%
- Average budget requested: €12.5 m
Example of Synergy projects

- **HELMHOLTZ** – "Holistic evaluation of light and multiwave applications to high resolution imaging in ophthalmic translational research revisiting the helmholtzian synergies"

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<tr>
<th>Name</th>
<th>Organization</th>
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<td>FR</td>
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"The eye, a 'small brain' with easily accessible structures, at the crossroad of human diseases"

11 861 923 €
Example of Synergy projects

- **SC2** – "Spin-charge conversion and spin caloritronics at hybrid organic-inorganic interfaces"

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<tr>
<th>Name</th>
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<td>Hitachi Europe</td>
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<td>Johannes Gutenberg Universitaet Mainz – moving from US</td>
<td>DE</td>
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<tr>
<td>Iain McCulloch</td>
<td>Imperial College of Science, Technology and Medicine</td>
<td>UK</td>
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'Combine spintronics and organic electronics to discover novel physical phenomena and design new materials'

Watanabe, Sirringhaus et al, PCT/GB2013/052736

9 651 489 €
Quick ERC overview

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Synergy Grant Objectives
(pending adoption of the WP in July 2017)

ERC Synergy Grants are intended to enable **minimum two to maximum four Principal Investigators** and their teams to bring together complementary skills, knowledge, and resources in new ways, in order to **jointly** address **ambitious** research problems.

The aim is to promote substantial advances at the frontiers of knowledge, to cross-fertilize scientific fields, and to encourage new productive lines of enquiry and new methods and techniques, including unconventional approaches and investigations at the interface between established disciplines. This should enable transformative research not only at the forefront of European science but also to become a benchmark on a global scale.

Applicants Principal Investigators must demonstrate the synergies, complementarities and added value that could lead to **breakthroughs that would not be possible by the individual Principal Investigators working alone.**
Groups applying for the ERC Synergy Grant must be made up of a minimum of two and a maximum of four Principal Investigators and, as necessary, their teams. One of the Principal Investigators must be designated as the Corresponding Principal Investigator.

Applications are expected from a group of innovative and active Principal Investigators and must present an early achievement track-record or a 10-year track-record whichever is most appropriate for their career stage (see Starting, Consolidator and Advanced Grant profiles above). There is little prospect of an application succeeding in the absence of such a record.

ERC Synergy Grants are designed to foster research at the intellectual frontiers. New types of joint effort may be needed that allow for new combinations of skills and disciplines, or the bringing together of researchers from different institutions, sectors or countries.
Restrictions that Scientific Council intends to apply

- A Principal Investigator whose proposal was evaluated as category B at step 1 or step 2 in the Synergy Grant call for proposals under Work Programme 2018 may not submit a proposal to the Synergy Grant calls for proposals made under Work Programme 2019.

- A Principal Investigator whose proposal was evaluated as category C at step 1 in the Synergy Grant call for proposals under Work Programme 2018 may not submit a proposal to any ERC research grant calls for proposals made under Work Programme 2019 or for the Synergy Grant call in 2020.

- All Principal Investigators whose proposal was rejected on the grounds of a breach of research integrity in the Synergy Grant calls for proposals under Work Programme 2018 may not submit a proposal to the calls for proposals made under Work Programme 2019.
Synergy Grant Call Outline
(pending adoption of the WP in July 2017)

• Indicative budget foreseen for 2018: 250 M€
  ➔ To select 25-30 projects
• 2 or 3 or 4 Principal Investigators
• No restrictions on location of PIs
  ➔ PI can come from the same corridor in one HI, different HIs within one country, or from different countries (within EU or AC)
• Indicative call opening: 19 July 2017
• Indicative call closure: 14 November 2017
• Proposals to be evaluated between November 2017 and September 2018
Synergy Grant Call Outline (pending adoption of the WP in July 2017)

• PIs to be considered as equal, but a corresponding PI to be designated who will be the administrative contact for the duration of the project.

• Normal maximum budget of 10 M€ per grant
  ➔ With additional 4 M€ more in case:
    • "start-up" costs for Principal Investigators moving to the EU or AC and/or
    • the purchase of major equipment and/or
    • access to large facilities

• Time commitment: ≥50% of working time in EU or AC and ≥30% of working time on the ERC project.
Synergy 2018 Evaluation Process

**Step 1**
- Single panel
  - ≤~700 proposals
- Remote evaluation of short proposals
  - SyG PMs + PEVs (PMs of other calls)
- SyG panel chairs meet: preselect proposals for full review
  - No of proposals: 130-170, up to ~7x call budget

**Step 2**
- 5 panels dynamically formed
  - ~130-170 proposals
- Remote evaluation of full proposals
  - SyG PMs + external specialized reviewers
- Panels meet: preselect proposals for interview
  - No of proposals: ~60, up ~3x call budget

**Step 3**
- max 5 interview panels dynamically formed
  - ~60 proposals
- PMs reassess the retained proposals
  - based on step 2 reports + interviews
  - Interviews: all PIs of all proposals in step 3 to be present in Brussels
- Panels rank the fundable proposals
  - ~30 proposals
• ERC foresees to be a highly competitive call
  ➔ only exceptional proposals are likely to be funded that will demonstrate that the **truly ambitious** research questions could lead to breakthroughs **only through the joint effort** of the complementary and synergistic group of PIs.

• ‘Synergy’ is not simply a successful collaboration
  ➔ The interaction would yield something more than just the sum of the individual parts.
  ➔ To yield possibly either unforeseen, completely new science, to cross fertilize disciplines or to solve important research problems that until now could not be dreamt of solving.

• Tough future restrictions on submissions planned
  ➔ applicants to think twice before applying: PIs evaluated with a **C score in 2018** will **not** be able to apply to any ERC call in 2019.
Celebrating ERC-10 in Europe and beyond

- ERC Week: 13 - 19 March
- 140 events in 35 countries
- Twitter: #ERC10yrs
- More information: erc.europa.eu/ERC10yrs/erc-week
After 10 Years, the ERC has been a Success Story

Key figures
7,000 top researchers funded
50,000 researchers & other professionals hired in ERC teams

with €12 billion

Breakthroughs
73% of completed projects led to breakthroughs/major advances

Scientific impact
> 5,500 articles among 1% most cited scientific journals

Open to the World
9 international initiatives for non-EU talent to join ERC teams

Prestigious prizes, e.g.
6 Nobel Prizes
5 Wolf Prizes
4 Fields Medals

ERC as model
15 EU countries set up ERC-like structures/funding schemes
The European Research Council

• More information: erc.europa.eu
  ➔ ERC Work Programme (published annually)
  ➔ Information for Applicants (published with each call)

• National Contact Points: erc.europa.eu/national-contact-points

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