FCT Fundação para a Ciência e a Tecnologia MINISTÉRIO DA EDUCAÇÃO E CIÊNCIA

# **European Research Council (ERC): Challenges and Opportunities**

## **European Research Council**



## **ERC** - After 7 years of existence... A success story

- √ Highly recognized by the research community
- ✓ Over 4 500 top researchers funded (65% are at an early career stage)
- √64 nationalities represented
- **✓** Working in ~600 different institutions in 29 countries

(although 50% grants in 50 institutions)

## **ERC** - After 7 years of existence... A success story

- **✓** Growing number of articles in scientific journals and prizes
- √ Highly competitive (average success rate 12%)
- **✓ Efficient and fast grant management**
- **✓ Eight Eleven Nobel Prize Laureates**

#### **HORIZON 2020**



Three pillars

Excellent Science

Industrial Leadership

Societal Challenges

Reinforcing and extending the excellence of the EU's science base and consolidating ERA to make EU's R&I system more competitive on a global scale



## **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

## **General aspects**

The PI may be of any age and nationality and may reside in any country in the world at the time of the application

Research must be conducted in a public or private research organization (Host Institution/HI) located in one of the EU Member States or Associate Countries

**Portability**: It is expected that the PI establishes and concludes the funded research project in association with the original host. However, the ERC grants allow PIs to transfer their projects from one host to another in the course of the project.

Research teams are headed by **a single Principal Investigator (PI)** + additional team members (6 members average) - it is <u>neither a network</u>, <u>nor a 'research consortium'</u>

## What kind of research can be funded?

## <u>Any field of research</u> with particular emphasis on the frontiers of science, scholarship and engineering

#### **ERC** encourages:

- Proposals of an <u>interdisciplinary nature</u> which cross the boundaries between different fields of research
- Pioneering proposals addressing <u>new and emerging fields of</u> <u>research</u>
- Proposals introducing <u>unconventional</u>, <u>innovative approaches and</u> <u>scientific inventions</u>

#### Research with a high-gain/high-risk profile

If successful, the payoffs will be very significant, but there is a higher-thannormal risk that the research project does not entirely fulfil its aims

Evaluators will pay particular attention to the **ground-breaking** nature of the research project and the **feasibility** of the outlined scientific approach

## **Starting and Consolidator Grants**

Starting Grant	Consolidator Grant			
The PI must have been awarded his/her first PhD at least 2 and up to 7 years prior to the publication date of the call for proposals	The PI must have been awarded his/her first PhD at least 7 and up to 12 years prior to the publication date of the call for proposals			
Extensions to this period may be allowed in case of eligible career breaks*				
Up to € 1.5 million (in some circumstances up to € 2 million) (100% direct costs + 25% indirect costs)	up to € 2 million (in some circumstances up to € 2.75 million) (100% direct costs + 25% indirect costs)			

Duration: up to 5 years

PIs expected to spend a minimum **50%** of their total working time on the ERC project and a minimum of **50%** of their total working time in an EU Member State or Associated Country

- Maternity (18 months for each child born <u>before or after</u> the PhD award);
- Paternity (documented amount of paternity leave actually taken for each child born <u>before or after</u> the PhD award);
- Long-term illness, clinical training or national service (the effective elapsed time since the award of the first PhD documented of leave actually taken by the PI for each incident which occurred after the PhD)

## What makes a competitive candidate?

#### **Competitive Starting Grant**

#### Must have already shown the potential for Must have already shown research research independence and evidence of maturity. e.g.: **at least one** important publication without the participation of their PhD supervisor

#### **Competitive Consolidator Grant**

independence and evidence of maturity. e.g.: **several** important publications without the participation of their PhD supervisor

Promising track-record of early achievements appropriate to their research field and career stage.

e.g.: significant publications (main author) in major international peer-reviewed multidisciplinary scientific journals, or in the leading international peer-reviewed journals of their respective field; invited presentations in well-established international conferences, granted patents, awards, prizes etc.

"Applicants are encouraged to evaluate their track-record and leadership potential against the above-mentioned benchmarks that have been adopted by the Scientific Council, in order to decide for themselves their likelihood for success, thus avoiding to invest effort in proposals that are very unlikely to succeed."

Application Form					
Part A To be filled out online	Administrative information about the project and the Principal Investigator				
Part B – Section 1 PDF to be uploaded To be evaluated in step 1	Extended Synopsis 5 pages	Concise presentation of the scientific proposal, with particular attention to the ground-breaking nature of the research project and the feasibility of the outlined scientific approach.			
	Curriculum Vitae 2 pages	Standard academic and research record and succinct 'funding ID'			
	Early achievements track-record 2 pages	publications; invited presentations in well- established international conferences, granted patents, awards, prizes etc			
Part B - Section 2 PDF to be uploaded To be evaluated in step 2	Scientific Proposal 15 pages	<ul><li>a. State of the art and objectives</li><li>b. Methodology</li><li>c. Resources (incl. project costs)</li><li>d. Ethical and Security sensitivity Issues</li></ul>			

## **Advanced Grants**

#### **Advanced Grant**

Applicants must be **scientifically independent** and have a recent research track-record and profile which identifies them as **leaders in their respective field(s) of research** 

up to € 2.5 million per grant
(in some circumstances up to € 3.5 million per grant)
(100% direct costs + 25% indirect costs)

Duration: up to 5 years

PIs expected to spend a minimum **30%** of their total working time on the ERC project and a minimum of **50%** of their total working time in an EU Member State or Associated Country

#### **Application Form**

#### Similar to Starting and Consolidator, except:

## Part B – Section 1 10-year track-record 2 pages

Activity over the past 10 years (dated from the deadline of the call):

- 1. Highlight ten representative publications, as senior author
- 2.3 major research monographs, chapters in collective volumes and any translations thereof
- 3.5 granted patents (if applicable)
- 4.10 invited presentations to peer-reviewed, internationally established conferences and/or international advanced schools (if applicable)
- 5.3 research expeditions that the applicant has led (if applicable)
- 6.3 organisation of International conferences in the field of the applicant (membership in the steering and/or programme committee) (if applicable)
- 7.International Prizes/Awards/Academy memberships (if applicable)
- 8. Major contributions to early careers of excellent researchers (if applicable)
- 9. Examples of leadership in industrial innovation (if applicable)

#### **Evaluation**

#### **Excellence** is the sole criterion for selection

#### **Evaluation Panels**

**25 peer review evaluation panels** (ERC panels), subdivided into three main research domains:

- ✓ Physical Sciences and Engineering (10 Panels)
- ✓ Life Sciences (9 Panels)
- ✓ Social Sciences and Humanities (6 Panels)

Panel chair and members chosen by the Scientific Council

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#### **Proof-of-Concept**

bridging gap between research – earliest stage of marketable innovation up to €150,000 for ERC grant holders for 12 months

#### Synergy Grant (two pilot calls in FP7)

Groups applying must be made up of 2 to 4 PIs

No specific eligibility criteria are foreseen for PIs, but **only exceptional proposals** are likely to be fundedin what are expected to be extremely competetive calls

It is expected that in most cases ERC Synergy Groups will be **interdisciplinary**, often using **multidisciplinary** approaches. However this is not a requirement and colleagues from the same or similar disciplines bringing together complementary approaches, expertise and resources can apply

Groups are not required to be co-located but the PIs in the group will have to demonstrate their commitment to the group project including willingness to spend significant 'core time' together at the same physical location

up to € 15 million per grant

Duration: up to 6 years



The Scientific Council will analyse the pilot phase of the ERC Synergy Grant before deciding on future calls (calls were made under Work Programmes 2012 and 2013).

There will be no call under Work Programme 2015.

## Main calls from the 2015 budget (indicative)

	Starting Grant	Consolidator Grant	Advanced Grant	Proof of Concept Grant
Call identifier	ERC-2015-StG	ERC-2015-CoG	ERC-2015-AdG	ERC-2015-PoC
Call Opens	7 October 2014	13 November 2014	10 February 2015	7 November 2014
Deadline(s)	3 February 2015	12 March 2015	2 June 2015	5 February 2015 28 May 2015 1 October 2015
Budget million EUR (estimated number of grants)	430 (330)	585 (330)	630 (280)	20 (130)
Planned dates to inform applicants	7 July 2015 12 November 2015	6 August 2015 20 January 2016	18 November 2015 16 March 2016	1 May 2015 1 October 2015

## **Restrictions on submission**

- PIs may submit proposals to different ERC grant calls under the same WP, but only the first eligible proposal will be evaluated;
- A PI whose proposal was evaluated as category C in the StG, CoG or AdG calls for proposals under WP 2014 may not submit a proposal WP 2015 and 2016;
- A PI whose proposal was evaluated as category B in the StG, CoG or AdG calls for proposals under WP 2014 may not submit a proposal WP 2015;
- A researcher may participate as PI or Co-PI in only one ERC frontier research project at any one time;
- The PI of an ERC project may not submit a proposal for another ERC grant, unless the existing project ends no more than two years after the call deadline;
- A PI who is Panel Member for a 2015 ERC call or who served as a Panel Member for a 2013 ERC call may not apply to a 2015 ERC call for the same type of grant.

## If you are thinking about applying...

Assess which is the best time for you to apply: have in mind the resubmission rules

Read carefully the Work Programme and Information for Applicants (former Guide for Applicants)

Contact the National Contact Point (FCT / GPPQ)

- > Alexandra Veiga: <a href="mailto:alexandra.veiga@fct.pt">alexandra.veiga@fct.pt</a>
- > Ana Mafalda Dourado: <a href="mailto:ana.mafalda@fct.pt">ana.mafalda@fct.pt</a>

## for additional information...

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Video

http://erc.europa.eu/get\_video/4009?height=353&width=650