

# ERC GRANTS: WHAT? WHY? HOW?

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## § WHAT?

In 2007, the European Commission established the **European Research Council**, an autonomous organisation operating through the **Ideas Programme** of the **7th Framework Programme (2007-2013)**.

All the European national research councils are involved in ERC. Funding will continue in the next framework programme **Horizon 2020**.

ERC launched its first call in 2007. There are three disciplinary domains:

1. Physical and Engineering Sciences.
2. Life Sciences.
3. Social Sciences and Humanities.

**Mission:** The goal of the ERC is to encourage high-quality research in Europe through competitive funding.



**Annual budget:** 1 billion Euro on average.

**Awarded:** Up to now, ERC allocated a total of  $\approx$  5 billion Euro to  $\approx$  3200 grantees.

ERC has several **granting schemes**:

1. **Starting Grants**  
( $\leq 1.5 + 0.5$  MEuro, 5 years, 2-7 years PhD)
2. **Consolidator Grants**  
( $\leq 2.0 + 0.75$  MEuro, 5 years, 7-12 years PhD)
3. **Advanced Grants**  
( $\leq 2.5 + 1.0$  MEuro, 5 years)
4. **Proof of Concept**  
( $\leq 0.15$  MEuro, 1 year, innovation)
5. **Synergy Grants**  
( $\leq 15$  MEuro, 6 years, 2-4 PI's, pilot)

Success ranking (in absolute numbers):

1. United Kingdom  $\approx 23\%$
2. Germany  $\approx 15\%$
3. France  $\approx 12\%$
4. Switzerland  $\approx 09\%$
5. The Netherlands  $\approx 07\%$

It is remarkable that small countries like Switzerland and The Netherlands perform so well.

## § WHY?

ERC supports **fundamental research** across Europe, with **high quality** as the sole selection criterion, irrespective of age, nationality and discipline.

ERC aims at serving the scientific research community in Europe in the best possible way: “**fund top talent with top ideas**”. ERC operates **bottom-up**: new instruments are being developed through pilots with feedback.

## Advantages:

Large amount of money, high flexibility and considerable leverage.

## Disadvantages:

Preparation requires a lot of work and success rates are small.



## Situation in The Netherlands:

The Topsectoren will only support applied research. Fundamental research is under pressure, and so are the NWO Vrije Competitie and Vernieuwingsimpuls.

The role of ERC as a funding channel for fundamental research is therefore expected to become more and more important.

## § HOW?

ERC grant applications are **highly competitive**. Applicants need to:

- boast a rock solid cv,
- provide an exciting and risky research plan,
- present a detailed work plan.

Grants center around a **single** principal investigator, who gathers other researchers (junior and senior) around him/herself at a **single** location. Grants may include costs for instruments.

Grant applications are submitted to a specialized panel. Proposals consist of two parts:

- Part 1: cv, summary of research plan.
- Part 2: detailed research plan.

### First selection round:

The panel looks at **Part 1** and retains  $\leq 30\%$  of the proposals, which are sent to external referees. The referees look at **Part 1** and **Part 2**, and comment on quality, feasibility, urgency and local embedding.

### Second selection round:

The panel makes the final decision, based on the **referee reports** and the panel's own **overall impression**. Average success rate  $\leq 10\%$ .

## Preparation advice:

1. Develop an **exciting** and **risky** research plan that sticks out.
2. Prepare a detailed work plan.
3. Proposal must be **innovative**, accessible and evidence-based.
4. Start early and **seek help** from outside.
5. Show **drafts** to colleagues, also non-experts, over and over again.
6. Be aware that competition is **fierce** and that panel members are **not** experts.

ERC Advanced Grant VARIS 267356:

F. den Hollander, **Variational Approach to Random Interacting Systems.**

Research focusses around five classes of highly complex random systems coming from probability theory and statistical physics, and involves several researchers from inside and outside The Netherlands, both junior and senior.

The grant supports:

- 4 postdocs (2 years)
- 3 graduate students (4 years)
- 6 visiting professors (0.5 year)
- 40% salary PI
- closing summer school

The grant has a considerable **multiplier effect**: the probability group in Leiden has grown from 6 to 21 members in the past three years.

## Brochure:

*ERC in the spotlight, Five years of ERC from a Dutch perspective, OCW, 2011.*

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