**Funding Frontier Research:
the ERC Success Story**

ERC Proof of Concept **HORIZON Lump Sum
Grant 2023**
(ERC-2023-PoC)

Dipartimento di Eccellenza
MUR 2023-2027
MUR

Against prostheses abandonment:
Immersive and low-cost platform for the
rehabilitation of upper-limb amputees

**Viviana Betti
PI of BRAIN*made***

**Proof of Concept Grants
of EUR 150,000 for a period of 18 months**

SAPIENZA
UNIVERSITÀ DI ROMA

SANTA LUCIA

COsync Lab

22 November 2023
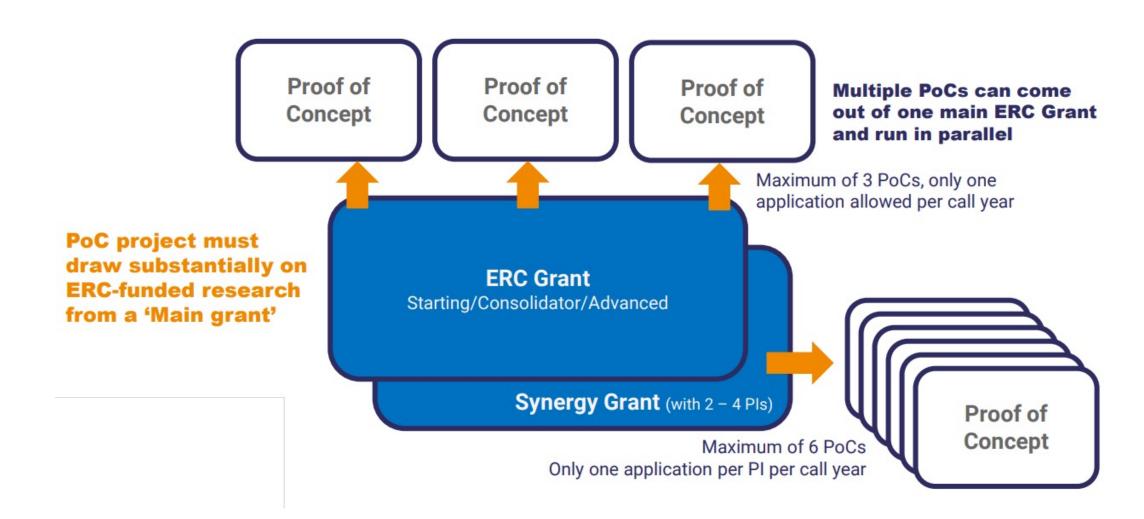
European Commission and the ERC

The objective is to **enable ERC-funded ideas to progress on the path from ground-breaking research towards innovation**.

Proof of Concept Grant would help among others:

- **testing, experimenting, demonstrating and validating the idea**;
- **conducting research** required to carry out the above activities and to address the weaknesses uncovered by them;
- **establishing viability, technical issues and overall direction**;
- **clarifying IPR protection or knowledge transfer strategy**;
- **involving industrial partners, societal or cultural organisations**, policymakers or any other potential stakeholder supporting the translation of research results into innovation;
- assessing potential **"end users" of the expected innovation**.

Reserved for ongoing or recent ERC Grantees

Admissibility and eligibility criteria

Excellence is the sole criterion on the basis of which ERC frontier research grants are awarded

3 Fundamentals Evaluation Criteria

1. Innovation Does the proposed idea have the potential to drive innovation and business inventiveness and/or tackle societal challenges? Are the proposed expected outcomes innovative or distinctive compared to existing solutions? Is the proposed idea high risk-high gain (i.e. if successful, the outcome will result in breakthrough innovation? Is there a risk that some aspects are difficult to overcome)?	**PASS**
2. Project Approach and methodology Are the proposed activities and planning appropriate and effective to explore the pathway from ground-breaking research towards innovation? Activities may include: - testing, experimenting, demonstrating and validating the idea; - conducting research required to carry out the above activities and to address the weaknesses uncovered by them; - clarifying IPR protection or knowledge transfer strategy; - involving industry partners, societal or cultural organisations, policymakers or any other potential stakeholder supporting the translation of research results into innovation; - assessing potential "end users" of the expected innovation. Are the proposed timescales and resources adequate for the implementation and feasibility of the project, and properly justified? Will the activities be conducted by persons well qualified for the purpose?	**PASS**
3. Principal Investigator - strategic lead and project management Does the PI demonstrate a clear vision on how to organise the management of the project, the consolidation of information and data needed to take strategic decisions and implement the proposed plan, including risk and contingency measures?	**PASS**
Has the proposal been awarded a pass mark by a majority of peer reviewers on each of the three evaluation criteria?	**YES**

Admissibility and eligibility criteria

Excellence is the sole criterion on the basis of which ERC frontier research grants are awarded

Evaluation Criteria

1. **Excellence related to the objectives of the grant**: are the objectives of the proposed project consistent with the requirements specified in the Work Programme and/or call for proposals? Do they, where appropriate, correspond to, or go beyond, best current practice?

2. **Impact:** will the project have a substantial impact in the context of the ERC objectives?

3. **Quality and efficiency of the implementation**: is the proposed methodology and work plan effective in reaching the goals of the project? Do they ensure the highest quality and/or utility of results?

Eligibility period: Principal Investigator(s) who have successfully defended their first PhD		
Starting Grant	**Consolidator Grant**	**Advanced and Synergy Grant**
> 2 and ≤ 7 years prior to 1 January 2023 Cut-off dates: Successful defence of PhD between 1 January 2016 and 31 December 2020 (inclusive)	> 7 and ≤ 12 years prior to 1 January 2023 Cut-off dates: Successful defence of PhD between 1 January 2011 and 31 December 2015 (inclusive)	No specific criteria

Step Submission

Part A – Online Form
Administrative Forms and Abstract

- General information
- Participants & contacts
- Budget
- Ethics & security questionnaire

Part B – Uploaded PDF
The PoC Proposal

- The idea: Breakthrough innovation potential   (max. 3 pages)
- Approach and methodology   (max. 6 pages)
- PI: strategic lead and project management   (max 1 page)

Annexes – Uploaded PDFs
Host Institution Letter, Letters of Support (where applicable), Ethics, Security
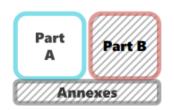
Step Submission

Part A

- **General information**

- **Participants & contacts**

- **Budget**

- **Ethics & security questionnaire**

  Use How to Guide and ERC Ethics page

Application Form from template

Part B

Strict minimum formatting requirements (as usual for ERC):

Page Format	Font Type	Font Size	Line Spacing	Margins
A4	Times New Roman, Arial or similar	At least 11	Single	2cm Side 1.5cm Bottom

The editable template will be on the EC portal once the call opens

Use the PoC Part B template provided in the meantime Link

Proposal description

The proposal will provide detailed descriptions of the project, its objectives, planning, execution, and required resources. It will comprise the following required elements:

- **A short description of the idea to be taken to proof of concept**. This should include an indication of the ERC-funded project, from which the idea is substantially drawn, and briefly demonstrate the relation between the idea and the ERC funded project in question.
- **An outline of the innovation potential of the idea** to be taken to proof of concept. This should include a clear description of how the idea will eventually lead to an innovation, as well as a description of the novelty and ambition of the expected outcomes compared to existing solutions.

ERC Proof of Concept Grant proposal submission and description

- **A description of how the project will make progress on the path from ground-breaking research towards innovation**. This may include: testing, experimenting, demonstration, validation, and further research covering these and other exploitation aspects; conducting research required to carry out the above activities and to address the weaknesses uncovered by them; clarification of IPR protection or knowledge transfer strategy; plans for involvement of potential stakeholders able to translate research results into innovation (e.g. industry partners, societal or cultural organisations, policymakers or any other). If such contacts already exist, include supporting documentation like letters of support or intent from the relevant stakeholders; assessment of potential "end users" of the innovation.

- **A reasonable and plausible plan of the activities** demonstrating the feasibility and effectiveness of the project, including a description of the timescale and resources planned for the implementation of the proposed project . A budgetary breakdown by cost for each activity should not be submitted.

- **Demonstration of the PI's strategic lead (or clear vision) to organise the management of the project**, and that the activities will be conducted by persons well qualified for the purpose

The Idea – Breakthrough innovation potential

The idea to be taken to proof of concept

- **The problem** – what is the problem or need that your idea will solve/alleviate?

- **The solution** –
  1) How does the idea solve user's problems or improve their situation?
  2) Why would potential users/sponsors pay for this solution over existing ones?

- **The origin** – describe the ERC project that this idea has come from

Breakthrough innovation potential

- Describe how your idea has the potential to **drive innovation** and **business inventiveness** and/or tackle **societal challenges**

- Describe how your project outcomes will be **innovative and disruptive**

- Describe any competing products or solutions

High-risk/high-gain idea

- Explain how your idea will result in **breakthrough innovation**

- Describe which are the **aspects that may be difficult to overcome** or what are the **features that might require development of new approaches.**

Maximum 3 pages

ERC Proof of Concept Section

Approach and methodology

The approach and methodology

- Describe how the project will make progress on the path from **ground-breaking research** towards **innovation**

- Demonstrate the **feasibility** and **effectiveness** of the project

- Demonstrate the **relevance** of the approach chosen for establishing the **technical** and **commercial/societal feasibility** of the project

Describe the activities

- Plans for **validation activities** and related **research**

- Clarify **IPR position** and strategy or **knowledge transfer** strategy

- Involve **industrial partners**, **societal/cultural organisation, policy makers** or other potential stakeholders

- Assess the potential "**end users**" of your expected innovation

Plan of the proof of concept

- Provide a narrative description of the **resources planned** for each activity and fully justify

- No breakdown of budget with cost figures needed (Lump Sum)

- Use a GANTT chart and/or milestones table

- Describe the size and nature of your **team**

Maximum 6 pages

PI's strategic lead and project management

Strategic lead

- Describe your role in the project, including how you will take the strategic lead of it.

Project Management

- Describe your organisational structure and the decision-making process

- Explain why these are appropriate to the complexity and scale of the project

Maximum 1 page

Help yourself to write a good PoC proposal

Help yourself to write a good PoC proposal Read the reference documents carefully:

- ERC 2023 Work Programme
- 2023 PoC Information for Applicants

Reach out for support at your Host Institutions, including from experts in tech transfer

Look up existing and past PoC grantees on the ERC database

Reach out to PoC grantees for advice and feedback.

Breakthrough innovation potential

• Does the proposed idea have the potential to drive innovation and business inventiveness and/or tackle societal challenges?

A clear
value proposition

Demonstration of Breakthrough Innovation Potential

• Are the proposed expected outcomes innovative or distinctive compared to existing solutions?

A *Valid Solution*

Demonstration of the high-risk/high-gain idea

• Is the proposed idea high risk-high gain? o If successful, will the outcome result in a breakthrough innovation? o Is there a risk that some aspects are difficult to overcome?

High-risk/high-gain idea

Approach and methodology

• Are the proposed activities and planning appropriate and effective to explore the pathway from ground-breaking research towards innovation?

- Outline the approach and methodology to explore the innovation potential of your ERC-funded research
- Description of the activities: exploring the pathway from ground-breaking research towards innovation

Activities may include:

- **testing, experimenting, demonstrating and validating the idea**;
- clarifying **IPR protection or knowledge transfer strategy**;
- involving **industry partners, societal or cultural organisations, policymakers**, or any other **potential stakeholder** supporting the translation of research results into innovation;
- **assessing potential "end users" of the expected innovation**.

- **Sustainability and business inventiveness**:
- **IPR position and strategy or knowledge transfer strategy**:

- **Industrial partners, societal or cultural organizations, supporting the translation of research results into innovation:**

- **Potential "end users" of the expected innovation:**

- **Economic impact**

Introduce Clear and Effective Economics Data

The position of BRAIN*made* in the market (our example)

ERC Proof of Concept: BRAIN*made*

Approach and methodology

• Are the proposed timescales and resources adequate for the implementation and feasibility of the project, and properly justified? Will the activities be conducted by persons well qualified for the purpose?

An adequate GANTT description

The European Research Council

- More information: erc.europa.eu

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

- New alerts: erc.europa.eu/keep-updated-erc

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