



Press release

2000th ERC Proof of Concept grant awarded

Under Embargo until 12:00 noon CEST, 11 July 2024

The European Research Council (ERC) has announced the award of 100 new Proof of Concept Grants, in the first round of the 2024 competition. This latest batch of grants includes the 2000th project to receive Proof of Concept funding since the scheme was introduced in 2011. Astrophysicist Nanda Rea, based at the Consejo Superior de Investigaciones Científicas (CSIC) in Spain, will manage this milestone project.

The grants – each worth €150,000 – help researchers to bridge the gap between the discoveries stemming from their frontier research and the practical application of the findings, including early phases of their commercialisation.

Nanda Rea's new project, called DeepSpacePULSE, aims to facilitate deep space exploration. Currently, to find their way, spacecraft and satellites use up a lot of energy exchanging vital navigation information with mission coordinators on Earth. Using ERC Proof of Concept funding, Prof. Nanda Rea will test the viability of a more efficient and autonomous navigation system. As part of her previous ERC Consolidator Grantfunded research, her team trained in locating compact pulsar stars, an essential tool of her newly designed navigation system. Pulsars, the final result of supernova explosions of very massive stars, can be used as perfect clocks with unprecedented stability, making them an ideal GPS system in space.

Leveraging the pulsars' attributes, a navigation system was already created and successfully tested on the International Space Station, by NASA. Now, to enable the use of an X-ray pulsar navigation system in future solar-system missions, and also deep-space missions that could potentially last a hundred years, the DeepSpacePulse team will work on a more precise, autonomous, small, light navigation unit - expected to be as big as a microwave oven and weigh about 10kg. The new unit aims to improve by an order of magnitude almost all aspects of similar, currently used, space navigation systems, as well as to be competitive in both the public and private space markets.

Iliana Ivanova, European Commissioner for Innovation, Research, Culture, Education and Youth, said: "Since 2011 when the scheme started, ERC grantees have received over €300 million in Proof of Concept grants. Thanks to Horizon Europe funding, they could advance on the path from ground-breaking research to innovation. These researchers are a great example of how to translate and commercialise the strong research output funded by the EU. I warmly congratulate Professor Nanda Rea and all of the other new winners of Proof of Concept funding."







President of the European Research Council Prof. Maria Leptin said: "Congratulations to all winners and of course the winner of the 2000th Proof of Concept grant! This milestone reminds us once again that many researchers seek to bring their research results to market. The ERC initially introduced its Proof of Concept funding because frontier research often generates radically new ideas that drive innovation and business inventiveness. We must invest seriously in such curiosity-driven frontier research, if Europe is to be able to lead."

In this round, the largest share of the Proof of Concept projects went to researchers who will base their projects in the UK (15 projects), the Netherlands (14), Italy (12), France, Germany, and Spain (10 each), Israel (7), Belgium (5), Austria, Denmark and Sweden (3 each), Finland and Ireland (2 each) and finally Norway, Portugal, Slovenia and Turkey (1 each).

List of Proof of Concept Grant winners in this final round

The Proof of Concept grant scheme is open only to researchers who currently hold, or have previously been awarded, ERC frontier research grants. These top-up grants help to explore the commercial or societal potential of the findings researchers made through their ERC projects. The objective is to enable ERC-funded ideas to progress on the path from ground-breaking research towards innovation.

The ERC's 2024 work programme included two calls for proposals for Proof of Concept grants with a total budget of €30 million. The funding is part of the EU's research and innovation programme, Horizon Europe.

Read also:

- ERC Scientific Council Working Group on Innovation and Relations with Industry
 https://erc.europa.eu/about-erc/thematic-working-groups/working-group-innovation-and-relations-industry
- More about <u>Proof of Concept Grants</u>

About the ERC

The ERC, set up by the European Union in 2007, is the premier European funding organisation for excellent frontier research. It funds creative researchers of any nationality and age, to run projects based across Europe. The ERC offers four core grant schemes: Starting Grants, Consolidator Grants, Advanced Grants and Synergy Grants. With its additional Proof of Concept Grant scheme, the ERC helps grantees to bridge the gap between their pioneering research and early phases of its commercialisation. The ERC is led by an independent governing body, the Scientific Council. Since November 2021, Maria Leptin is the President of the ERC. The overall ERC budget from 2021 to 2027 is more than €16 billion, as part of the Horizon Europe programme, under the responsibility of European Commissioner for Innovation, Research, Culture, Education and Youth, Iliana Ivanova.





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