

Four Hungarian researchers won top European grant of EUR 2 million

Two project proposals in neuroscience, one in mathematics and one in political history received the Consolidator Grant of the European Research Council (ERC). In winning this top European grant, Hungarian researcher Judit Makara was also helped by the “ERC Booster” funding scheme of the NRD Office.

The ERC Consolidator Grant is awarded to researchers already having a research team and an independent research programme to help them consolidate their work. Researchers could apply for the grant (amounting to a maximum of EUR 2 million per project) with five-year research proposals having a high potential for outstanding discovery or scientific breakthrough.

This year 2538 research proposals were submitted to the Consolidator Grant call, but only 13% (329 proposals) were selected for funding. The total amount of grant provided under the scheme is EUR 630 million, financed from the Horizon 2020 framework programme of the European Union. According to the summary, 32% of the grants were awarded to female applicants, and the five-year research projects will create an estimated 2,000 new jobs.

One of the grantees, Judit Makara (Institute of Experimental Medicine, Hungarian Academy of Sciences / HAS) returned to Hungary from the American Howard Hughes Medical Institute in 2011 as one of the winners of the Momentum call, and founded an independent research group in the Institute of Experimental Medicine. Her research focuses on dendrites, the short branches of nerve cells which convey information from other cells. Judit Makara and her colleagues primarily study the hippocampus part of the brain which plays a key role in memory processes, more specifically the CA3 area which – due to its network-like structure – has long been considered an important station in associative memory storage. The researcher won another grant back in 2016, amounting to HUF 45 million, financed from domestic sources (NRDI Fund) in the second round of the [Call for applications to request national funds in connection with the research funding programmes of the European Research Council \(ERC_HU_15\)](#) which helped continue her work and participate in the next ERC round more successfully.

János Szabadics was also among the researchers who could establish an independent research team under the Momentum call also hosted by the HAS Institute of Experimental Medicine. His research project now focuses on axons, the long threadlike extensions of nerve cells. The small-diameter axons wire the entire nervous system to transmit neural information from individual nerve cells to thousands of other nerve cells. Although these tiny cell constituents have enormous importance, we have only little knowledge about them, partly due to the fact that the general-sized axons were previously unavailable for biological test methods of sufficient detail.

Gábor Pete is a research fellow at HAS Alfréd Rényi Institute of Mathematics. His main focus of interest is probability theory and statistical mechanics. In the framework of his ERC grant winning project, he will study the noise-sensitivity of functions.

The fourth Hungarian researcher to win the ERC Consolidator Grant is Gábor Egry from the Institute of Political History.

The largest funding system aimed at promoting discovery research is operated by the European Research Council (ERC). It aims to provide long-term funding to cover the costs of pioneering high-risk-high-return research projects. [Hungary is among the top performers in the EU13 in terms of ERC grants](#): in the last 10 years 40% of all grants in the region were awarded to researchers working in Hungary.

For more information about the above research projects please read the article at mta.hu.