



Press release

24 January 2012

The ERC supports another 294 senior top researchers in Europe

With a budget of just over €660 million, the European Research Council (ERC) is funding 294 top researchers in the fourth competition for its coveted Advanced Grants. These established scientists will perform ground-breaking 'blue sky' research over the coming five years across Europe. Open to all domains, the grants are worth up to €3.5 million each. The demand for ERC funding is still on the rise; the number of applications increased by 13% compared to the last Advanced Grant call. The projects selected cover a wide array of topics, for instance new treatments of visual impairment (presbyopia), and a better use of sustainable fuels for automotive and aeronautic engines.

Commissioner for Research, Innovation and Science, Máire Geoghegan-Quinn said: *"Supporting the very best researchers working at the frontiers of knowledge is essential for European competitiveness. The European Research Council has been a huge success in its first five years, with an ever growing flow of research results from its investment. I have therefore proposed a major increase of the ERC budget under the EU's future research and innovation programme, Horizon 2020".*

ERC President Professor Helga Nowotny commented: *"On the eve of the ERC's fifth anniversary celebrations, we are pleased to announce another successfully concluded call, providing substantial funding for many more established researchers of any age and nationality. I am particularly glad that we are able to maintain a success rate of 12%, faced with a continuing increase in demand for ERC grants. Europe should make sure to nurture the talent it has and is able to attract, especially in times of the crisis".*



This Advanced Grant call attracted 2284 proposals, which is a 13% rise from the last call. The estimated total budget also increased by 12% from last year. The success rate remains stable at 13%.

Regarding the profile of these senior researchers, the average age is about 53 years. The number of female researchers selected (12%) slightly increased in this call. The projects will be carried out in universities or research institutions in 20 countries across Europe¹. The greatest number of grant winners will be based in the United Kingdom, Germany and France. In this call, 26 different nationalities are represented, with British, German and French researchers being the most numerous. (See statistics below). Furthermore, of the awarded grants, around 46% are in the domain 'Physical Sciences and Engineering', 36% in 'Life Sciences' and 18% in 'Social Sciences and Humanities'. (See examples of projects below)

Lists of selected researchers

The below lists show the proposals selected for funding. Some additional funds are expected to be confirmed which will enable the ERC to support a few more projects that are presently on a reserve list. The lists will subsequently be updated. Proposals placed on the reserve lists will only be published once their actual funding has been confirmed.

List of all selected researchers by country of host institution (in alphabetical order within each country group): http://erc.europa.eu/sites/default/files/document/file/erc_2011_adg_results_all_domains.pdf

Lists of selected researchers by domain (in alphabetical order):

- Social Sciences and Humanities:
http://erc.europa.eu/sites/default/files/document/file/erc_2011_adg_results_sh.pdf
- Life Sciences:
http://erc.europa.eu/sites/default/files/document/file/erc_2011_adg_results_ls.pdf
- Physical Sciences and Engineering:
http://erc.europa.eu/sites/default/files/document/file/erc_2011_adg_results_pe.pdf

Statistics (Advanced Grant call 2011):

http://erc.europa.eu/sites/default/files/document/file/erc_2011_adg_statistics.pdf

¹ EU Member State or "FP7 associated country" by December 2011 (Albania, Bosnia and Herzegovina, Croatia, Faroe Islands, Former Republic of Macedonia, Iceland, Israel, Liechtenstein, Montenegro, Norway, Serbia, Switzerland and Turkey)



Some examples of projects selected for funding

Social Sciences and Humanities

The **Codex** project will use state-of-the-art genetic tools to build up a "DNA data matrix" of domestic animals over the last 10,000 years. The matrix could help identify key genetic changes that accompany domestication and subsequent animal management strategies. When put into perspective with past events, it could also uncover episodes of social change and give insights of value to modern farming, disease control and animal productivity.

(Daniel Bradley, Trinity College Dublin, Ireland)

The **UIC** project aims at understanding how gender dynamics participate in institutional changes such as the transitions to democracy or the setting up of new institutions and public services. By bringing together the concerns of male/female equity and the most recent developments in new institutionalism, the project should provide new findings concerning the impact of a gendered nature of institutions observed in six in-depth case studies from the EU, South America and Africa.

(Georgina Waylen, University of Sheffield, UK)

Life Sciences

Limb regeneration capacity varies greatly among vertebrates, ranging from full regeneration in salamanders to wound healing in humans. The molecular and cellular basis of regeneration is still unknown, but species variation could be linked by common mechanisms and cells. The **RegenerateAcross** project will examine fibroblasts (i.e. cells of connective tissue important for limb regeneration in salamanders and wound healing in humans) in order to identify cell subpopulations responsible for regeneration and molecules that signal regeneration in different species. Resulting applications could be of great clinical interest.

(Elly Margaret Tanaka, Technische Universität Dresden, Germany)

The **Presbyopia** project proposes new alternatives to treat presbyopia, an ocular condition affecting people from 45 years of age, including multifocal corrections and accommodating intraocular lenses. The team will study the ability of the eye's crystalline lens to change its shape to focus on near and far objects (i.e. its accommodation), with the aim of developing bio-inspired intraocular lenses that can mimic the dynamic and continuous focusing ability of the eye.

(Susana Marcos, Agencia Estatal Consejo Superior de Investigaciones Científicas (CSIC), Spain)

Physical Sciences and Engineering

The **VarCity** project aims to drastically innovate large scale 3D city modelling by creating more automated, realistic and compact models. While safeguarding anonymity, it will provide an improved live 'Google street', offering the dynamics of traffic flows and links to landmarks with their corresponding Wikipedia pages and videos of special events.

(Luc van Gool, Eidgenössische Technische Hochschule (ETH) Zürich, Switzerland)

The **2G-CSafe** project will look at how the combustion of second generation biofuels could be used in the future for aeronautic and automotive engines. This research will not only help gather new data on combustion kinetics (i.e. chemical reactions taking place during combustion) and pollutant formation, but will also address current concerns about the security of biofuel supply and its efficiency challenges.

(Philippe Dagaut, Centre National de la Recherche Scientifique (CNRS), France)



Note to the editors

Set up in 2007 by the EU, the **European Research Council** (ERC) is the first pan-European funding organisation for frontier research. It aims to stimulate scientific excellence in Europe by encouraging competition for funding between the very best, creative researchers of any nationality and age. The ERC also strives to attract top researchers from anywhere in the world to come to Europe.

It funds both senior research leaders ('ERC Advanced Grants') and younger, early-career top researchers ('ERC Starting Grants'). The funding, awarded based on peer review evaluation with excellence as sole criterion, can amount to maximum €2 million for a 'Starting Grant' and €3.5 million for an 'Advanced Grant'. Two additional, more limited forms of funding were introduced in 2011: the top-up grant 'Proof of Concept' targeted at ERC grant holders to fund the gap in the earliest stage of an innovation, between "blue sky" research and commercialisation, and the 'ERC Synergy Grants', launched on a pilot basis for exceptional proposals by a few small size groups of researchers working together.

The ERC operates according to an 'investigator-driven', or 'bottom-up', approach, allowing researchers to identify new opportunities in any field of research. The ERC, which is the newest, pioneering component of the EU's Seventh Research Framework Programme ('Ideas' Specific Programme), has a total budget of €7.5 billion from 2007 to 2013. For the next Framework Programme, 'Horizon 2020', the European Commission has proposed a major increase of the ERC budget. It is led by the ERC Scientific Council, composed of 22 top scientists and scholars, and the ERC President is Professor Helga Nowotny. The ERC Executive Agency implements the "Ideas" Specific Programme and is led by Director (ad int.) Pablo Amor. The ERC Secretary General is Professor Donald Dingwell.

ERC Advanced Grant in brief

- For well-established top researchers of any nationality / age, scientifically independent and with a recent research track-record and profile which identifies them as leaders in their respective field(s)
- Funding: up to €3.5 million per grant (normally up to €2.5 million).
- Calls for proposals: published annually in autumn with deadlines in spring

ERC also supports early-career top researchers of any nationality and age, with 2-12 years of experience after PhD. The calls for proposals for Starting Grants are generally published in summer with deadlines in autumn.

Links

ERC Press Release on outcome Advanced Grant call (2010)

http://erc.europa.eu/sites/default/files/press_release/files/erc_pr_2011_results_adg2010_0.pdf

Statistics Advanced Grant call 2010

http://erc.europa.eu/sites/default/files/document/file/erc_2010_adg_statistics.pdf

Some striking ERC-funded projects from previous years

<http://erc.europa.eu/success-stories>

ERC website

<http://erc.europa.eu>

ERC Press Contacts:

Madeleine Drielsma (Press and Communication adviser)

Tel: +32 (0)2 298 76 31, Fax: +32 (0)2 297 96 20

erc-press@ec.europa.eu

Maud Scelo (Press and Communication adviser)

Tel: + 32 (0)2 298 15 21, Fax: + 32 (0)2 297 96 20

erc-press@ec.europa.eu