

**European Science and Technology Highlights
National Science Foundation Europe-Eurasia Office
2015**



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1 Europe

1.1 EU backs 328 top early-career researchers with €485 million (January 2015)



The European Research Council (ERC) has selected 328 first class scientists to receive its prestigious Starting Grants, worth up to €2 million each (\$2,4 million). The awarded €485 million (\$573.8 million) contributes to supporting a new generation of top scientists in Europe developing so-called "blue sky research": ambitious high-risk, high-gain research projects in any field.

The projects selected cover a wide array of topics, including wearable electronic textiles powered by body heat, detection of bacteria by smell, 'toxic expertise' in the petrochemical industry, the origins of human rationality, combatting cancer related inflammation, as well as optimizing user interface design.

Full article available at:

http://europa.eu/rapid/press-release_IP-14-2634_en.htm?locale=en

Additional information available at:

http://www.forskningsradet.no/en/Newsarticle/ERC_allocations_on_the_rise/1254003896614

1.2 The European Polar Board Secretariat is moving (January 2015)



ESF would like to inform you that the European Polar Board secretariat will be moving to the Netherlands Organization for Scientific Research (NWO), its new location, as of January 1st 2015.

The EPB has been hosted at ESF since its inception in 1995 as EMaPS (European Forum for Marine and Polar Science) to encourage the development of European co-operation in the fields of marine and polar science, which then evolved into two separate boards: the European Marine Board and the European Polar Board. ESF is pleased to have hosted EPB since its inception in 1995 and wishes it every success in the future.

Full article available at:

http://www.esf.org/media-centre/ext-single-news/article/the-european-polar-board-secretariat-is-moving-1070.html?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+esf%2FGlobal+News+%28ESF+++Global+News%29

1.3 New EU initiative to build capacity for technology transfer (February 2015)

On January 20th, PROGRESS-TT, a new Horizon 2020 project was launched in Brussels. This marked the beginning of a European Commission initiative to improve the capacity of public research organizations to convert investment in research into commercial returns through innovation.



Full article available at:

http://cordis.europa.eu/news/rcn/123030_en.html

1.4 Commission helps bring Europe's best innovations to the market (February 2015)

With the support of the European Research Council (ERC) "Proof of Concept" grants, 59 researchers in Europe will now get the chance to turn their inventions into viable products. Among these mould-breaking ideas are such innovations as a simple blood test to diagnose breast cancer, a timber wood tracking device to help prevent illegal deforestation, and artificial veins modelled on marine sponges. Worth up to €150,000 (\$170,125), these grants will allow selected ERC grantees to build start-ups, establish intellectual property rights for their inventions or explore other ways to test their ideas on the market.



Full article available at:

http://europa.eu/rapid/press-release_IP-15-4084_en.htm?locale=en

1.5 Foreign students to pay full fees for higher education? (March 2015)



Crédit : Com&O

A new report suggests that most foreign students from outside the European Union should pay full tuition fees, and these resources – estimated at €850 million (US\$940 million) – should be invested to ensure France can adapt to the new challenges of internationalizing higher education while offering a fair, high-quality, attractive system.

The report, *Investir dans l'Internationalisation de l'Enseignement Supérieur – Investing in the Internationalisation of Higher Education* – is by Nicolas Charles and Quentin Delpech of France Stratégie, a strategic and consultative unit attached to the Prime Minister's office.

Full report available at:

<http://www.universityworldnews.com/article.php?story=20150305095959280>

1.6 Europe's research commissioner lays out his ambitions - Carlos Moedas on European funding models, diplomacy and scientific advice (April 2015)



Carlos Moedas wants to improve the working lives of scientists.

Last November, Portuguese engineer-turned-economist Carlos Moedas was plucked from managing his country's budget-cutting austerity program to take charge of the research portfolio at the European Commission in Brussels.

Five months into his five-year term as research commissioner, Moedas spoke to *Nature* about his hopes and ambitions for the scientific programs run by the European Union (EU), particularly the huge seven-year €80-billion (US\$86-billion) Horizon 2020 (H2020) research program, which runs until 2020. Moedas wants scientists to change their mentality for H2020, breaking free of individual silos and

including more social science.

Full article available at:

<http://www.nature.com/news/europe-s-research-commissioner-lays-out-his-ambitions-1.17165>

1.7 Different approaches to fees for international students (April 2015)

All Nordic countries offer free higher education to their citizens. Traditionally, international students have also been able to study for free in this region but in 2006 Denmark introduced tuition fees for international students coming from outside the European Union and the European Economic Area.

Then in 2011, the Swedish educational authorities also introduced this type of fee. The same measure was suggested by the central authorities in Finland and Norway, although abandoned after some public debate.

In the Nordic countries of Denmark, Finland, Iceland, Norway and Sweden, higher education is basically publicly funded. In Denmark, Finland and Norway, some 95% of investment in tertiary education comes from public sources, according to the OECD report *Education at a Glance 2014*. In line with Nordic welfare state ideology, the opportunity to enter higher education should be equal for all citizens.

Full article available at:

<http://www.universityworldnews.com/article.php?story=20150331054410125>

1.8 Debating the impact of research on society (May 2015)

More than 400 university leaders and representatives from the European higher education sector met on April 16 and 17 at the annual conference of the European University Association, where Professor Rolf Tarrach, former rector of the trilingual University of Luxembourg, was elected president as the sole candidate for the position.

Tarrach succeeds Professor Maria Helena Nazare, a former rector of the University of Aveiro, as the fifth president of the EUA when he assumes the president's role in July.

Full article available at:

<http://www.universityworldnews.com/article.php?story=20150414073906315>

1.9 Innovation performance: EU Member States and international competitors compared (May 2015)



This fact sheet explains the objectives of the Innovation Union Scoreboard and provides an overview of the research and innovation performance of EU Member States and some associated and neighboring countries, as measured by the Innovation Union Scoreboard 2015.

What is the Innovation Union Scoreboard (IUS)?

The Innovation Union Scoreboard provides a comparative assessment of the research and innovation performance of the EU Member States and the relative strengths and weaknesses of their research and innovation systems. It helps Member States assess areas in which they need to concentrate their efforts in order to boost their innovation performance. In addition, the IUS covers Serbia, Former Yugoslav Republic of Macedonia, Turkey, Iceland, Norway and Switzerland. On a more limited number of indicators, available internationally, it also covers Australia, Brazil, Canada, China, India, Japan, Russia, South Africa, South Korea and the US.

Full article available at:

http://europa.eu/rapid/press-release_MEMO-15-4928_en.htm?locale=en

2 Baltic Sea

2.1 Towards science-based policies for the Baltic Sea (February 2015)



The challenges affecting a regional sea cannot be tackled effectively by individual countries acting alone. Nor can they be addressed without a thorough understanding of the relevant facts and processes. The states bordering the Baltic Sea are cooperating in a joint research program to provide policy-makers with the information they need to achieve greater sustainability.

Full article available at:

http://ec.europa.eu/research/infocentre/article_en.cfm?id=/research/headlines/news/article_15_01_30_en.html?infocentre&item=Infocentre&artid=33839

3 Finland

3.1 Funding granted to new Academy Research Fellows in biosciences and environmental research (May 2015)

At its meeting on Thursday 23 April, the Academy of Finland's Research Council for Biosciences and Environment decided to provide funding to eleven new research posts as Academy Research Fellow. The funding period is set to start in September.

Within the September 2014 call, the Research Council received a total of 120 applications for funding for research posts as Academy Research Fellow. Women accounted for 52 per cent and foreign nationals for 29 per cent of the applicants. The total sum granted by the Research Council towards the salaries of Academy Research Fellows is some 4.8 million Euros (USD 5.2 millions).

The funding for Academy Research Fellows is granted for five years. The funding is intended to advance and strengthen the opportunities of the best advanced researchers to qualify themselves for academic leadership and establish themselves as independent researchers. The reviewers also pay attention to the career advancement of talented researchers.

Full article available at:

<http://www.aka.fi/en-GB/A/Academy-of-Finland/Media-services/Releases1/Funding-granted-to-new-Academy-Research-Fellows-in-biosciences-and-environmental-research/>

4 Germany

4.1 DFG - 18 New Priority Programs (April 2015)



Subjects Range from Turbulent Flows and Innate Lymphoid Cells to the Rise in Sea Levels and Organizational Forgetting / Approximately 105

Million Euros for Three Years

The Deutsche Forschungsgemeinschaft (DFG, German Research Foundation) will establish 18 new Priority Programs, in which researchers will investigate fundamental scientific questions in particularly topical or emerging areas of research over the next few years.

The new Priority Programs were selected by the Senate of the DFG – Germany's largest research funding organization and central self-governing organization for the research community –in Bonn from a total of 87 initiatives. This represents 15 more initiatives than the previous year, indicating a very high interest in the Priority Programs a funding instrument.

Full article available at:

http://www.dfg.de/en/service/press/press_releases/2015/press_release_no_10/index.html

5 Hungary

5.1 Research agency will lose autonomy (January 2015)

On January 1st, 2015, a large new government office will take over Hungary's research-grant agency for basic science, OTKA. This will assume all budget management for research, development and innovation — destroying what the European Science Foundation has described as the agency's “high degree of political autonomy”.

Full article available at:

<http://www.nature.com/nature/journal/v516/n7531/full/516329c.html>

5.2 Hungary: Number of students admitted falls 20% since 2010 (April 2015)

The number of students admitted to higher education institutions in Hungary has fallen by over 20% since 2010, according to a report issued by the Center for International Higher Education Studies. This makes Hungary one of the few OECD member states in which the number of higher education students has declined over the past four years.

Although figures are still unavailable for the year 2015, experts do not expect a large increase in the number of applicants and claim that rapid changes in rules applying to university and college admissions have had a negative effect on students' willingness to study in higher education.

Full article available at:

<http://www.universityworldnews.com/article.php?story=20150403112018354>

6 Latvia

6.1 Latvian EU presidency research priorities (February 2015)

Latvia, for the first time, is assuming the presidency of the EU Council from January 1st to June 30th, 2015 taking over from Italy. The priorities of the Latvian Presidency regarding research and innovation were presented at the European Parliament's Industry, Research, and Technology (ITRE) Committee by Latvian Education and Science Minister Māriņa Seile (*picture*).

The Latvian presidency's efforts will concentrate on better integration of the Innovation Union and the European Research Area (ERA), fostering Europe-wide networks without barriers while fully exploiting the potential of national research and innovation systems. The presidency will place an emphasis on the enhancement of the ERA through the ERA Roadmap, to be released by mid-2015 and in which EUREKA is contributing as a key stakeholder. In this regard, the Presidency will already focus on the roadmap's implementation and particularly on the optimal use of public investments in research. (EUREKA is an EU program that will spend 1.1 billion Euros over the next seven years to support collaboration among universities, research centers, and small businesses to enhance industrial innovation.

Full article available at:

http://www.eurekanetwork.org/about/-/journal_content/56/10137/4549154?refererPlid=10195

7 Norway

7.1 First non-Norwegian to head nation's largest university college (May 2015)

Minnesota-born Professor Curt Rice has been appointed rector of the Oslo and Akershus University College of Applied Sciences, the largest university college in Norway aspiring to become a university.

A pro-rector for research and development at the University of Tromsø, Rice was one of 14 applicants for the Oslo position and won, although a foreigner taking up the top post at a university in northern Europe is extremely rare. But he told University World News that his origins were not an issue at the interview.

Rice brings a fresh approach to Norwegian higher education while subscribing to the Google leadership principle: "Support the staff; match people and opportunities. And stay out of the way".

Full article available at:

<http://www.universityworldnews.com/article.php?story=20150416035117818>

7.2 Norway and Portugal strengthen cooperation (May 2015)



Norway and Portugal sign agreements on increased ocean-related scientific and technological cooperation. "All it takes is a glance at the map to see that Portugal and Norway share a common interest in boosting research for sustainable management and exploitation of marine resources," states Director General Arvid Hallén of the Research Council of Norway.

Two mutually beneficial agreements - On 4 May, government ministers and research council heads from Portugal and Norway convened at the Research Council of Norway in an official meeting to sign two bilateral agreements. These agreements emphasize the strategic importance of the sea for growth and development.

Arvid Hallén (Photo: Sverre Jarild)

Full article available at:

http://www.forskningradet.no/en/Newsarticle/Norway_and_Portugal_strengthen_cooperation/1254008965831

7.3 NOK 900 million (\$121 million) available for research-based innovation for industry (May 2015)

A record amount of funding is available for research and innovation projects in companies. This year the Research Council of Norway has made it even easier for companies to seek funding, and for the first time companies across the entire business sector will be able to find a call for proposals suited to their R&D needs.

The NOK 900 million (\$121 million) in funding for Innovation Projects for the Industrial Sector is part of the Research Council's effort to step up the pace of innovation in Norwegian trade and industry and promote a more knowledge-based, competitive and adaptable business sector.

Full article available at:

http://www.forskningsradet.no/en/Newsarticle/NOK_900_million_available_for_researchbased_innovation_for_industry/1254008982723

8 Russia

8.1 Universities to launch foreign student recruitment hub (February 2015)

The 15 Russian universities that make up the Global Universities Association are creating a unified center to recruit foreign applicants.

Maxim Khomyakov, the director of the center and vice-rector for international affairs at Ural Federal University in Yekaterinburg said that the center would open at the beginning of this year. However, "it will only have a minimal impact on the group [of foreign students] in 2015".

Full article available at:

<http://www.universityworldnews.com/article.php?story=20150122210443683>

8.2 Government to close two in every five universities (May 2015)

The number of Russian universities will be cut by 40% by the end of 2016, according to Minister of Education and Science Dmitry Livanov. In addition, the number of university branches will be slashed by 80% in the same period.

The institutions are being axed under a federal plan for the development of education during 2016 to 2020. Ministry of Education and Science data indicate that at present there are 593 state and 486 private universities, which have 1,376 and 682 branches respectively.

Collectively, the universities cater for seven million students, of whom two million are holding state-funded places at an estimated average cost of US\$3,500 per student.

Full article available at:

<http://www.universityworldnews.com/article.php?story=20150417043945585>

9 United Kingdom

9.1 EPSRC invests in UK/China research partnerships for sustainable materials for infrastructures (January 2015)

EPSRC

Engineering and Physical Sciences
Research Council

Six new research projects, to improve the sustainability of infrastructure development in the UK and China, are to receive over £3 million (\$1.5 million) in funding from the Engineering and Physical Sciences Research Council (EPSRC).

The funding follows on from a visit to the UK earlier this year by NSFC President

Yang Wei. The projects will involve academics from nine UK universities which will partner with nine leading institutions in China.

Full article available at:

<http://www.alphagalileo.org/ViewItem.aspx?ItemId=148386&CultureCode=en>

9.2 Quality of European research 'threatened by cuts' (February 2015)

British universities risk losing their position as world-leading institutions if proposed cuts to the European Union research budget go ahead, according to the president of the umbrella organization Universities UK.

Professor Sir Christopher Snowden, who is also vice-chancellor of the University of Surrey, has warned against cuts to the EU's Horizon 2020 budget, a major source of funding to UK universities and research centers. Horizon 2020 is worth £67 billion (US\$102 billion) over the next six years (2014-20), with UK academics in line to receive £2 billion (US\$3 billion) in the first two years of the program.

Full article available at:

<http://www.universityworldnews.com/article.php?story=20150122205544131>

9.3 Widening access to Scottish universities (April 2015)

More school pupils from the poorest areas are being admitted to Scotland's universities despite many falling short of the exam grades they would normally need, official figures have suggested. A report by the Scottish Funding Council found the proportion of students from the country's most deprived communities has increased to 13.4% following a drive to "widen access". Angela Constance, the Scottish cabinet secretary for education, praised the figures as evidence of the "progress" being made on Nicola Sturgeon's goal that every child should have an "equal chance" of attending university.

Full article available at:

<http://www.universityworldnews.com/article.php?story=20150403111558511>

9.4 Universities at risk of falling short on investment (April 2015)

England's universities risk being "unable to deliver the scale of investment" needed to "remain internationally competitive". That is the warning from the Higher Education Funding Council for England, which says in a report on 2013-14 sector finances, published late last month, that without increased surpluses and continued government support such a risk is present. The sector's results from that year show "a financially sound position overall", says the report, titled Financial Health of the Higher Education Sector: Financial results and TRAC outcomes 2013-14.

Full article available at:

<http://www.universityworldnews.com/article.php?story=20150403112801947>

9.5 UK researchers fret about downgrading of science minister role (May 2015)



Jo Johnson, new Minister for Research

UK researchers have greeted the appointment of new science minister Jo Johnson with concern about how much influence he will have at the highest level of government.

Appointed to the post on May 11th by re-elected Prime Minister David Cameron, Johnson is well connected with senior-level ministers, and is tipped as a rising star in the Conservative Party. But Cameron has not chosen him to attend meetings of the cabinet — the government's most senior decision-making body, comprised of an inner circle of top politicians.

Full article available at:

<http://www.nature.com/news/uk-researchers-fret-about-downgrading-of-science-minister-role-1.17535>

10 Ukraine

10.1 Ukraine joins Horizon 2020 to work with EU in science and research (April 2015)



European Commissioner Carlos Moedas (left) and Ukrainian education and science minister Serhii Myronovych Kvit exchange signatures in Kiev

Researchers, businesses and innovators from Ukraine will now be able to fully participate in Horizon 2020, the European Union's research and innovation funding program, on equal terms with EU Member States and other associated countries. This is thanks to the Agreement for the Association of Ukraine to Horizon 2020, signed on March 20, 2015 in Kyiv by Carlos Moedas, European Commissioner for Research, Science and Innovation, and Serhiy Kvit, Minister of Education and Science of Ukraine

Full article available at:

http://europa.eu/rapid/press-release_IP-15-4640_en.htm?locale=en

Additional information available at:

<http://www.nature.com/news/ukraine-joins-flagship-european-research-programme-1.17164>

<http://news.sciencemag.org/europe/2015/03/ukraine-joins-e-u-research-club-steep-discount>

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