

WINTER 2016

Newsletter of the European Research Council

Federica Mogherini highlights scientific cooperation

## Frontier research in science diplomacy

More overseas talent joins ERC teams









































### >>> editorial



#### Science diplomacy and the EU Global Strategy

Through the centuries, science has been both a weapon and a tool to build peace. After World War Two and Hiroshima, a group of scientists led by Albert Einstein began to work for a world free of nuclear weapons. Cooperation on science and research – through Euratom, CERN or the European Space Agency – helped lay the foundations of European integration. Our world today is more dangerous than ever: our European Union needs to look at science to strengthen our security, and to foster dialogue in our region and beyond.

Our strategic environment has changed dramatically over the past few years. The challenges we face are incredibly and increasingly complex. Energy security, climate change and cyber security have become common issues in our foreign policy agenda. To tackle them in the best possible way, we need good science and top-class research. At the same time, science diplomacy can be an additional resource in our work towards peace, dialogue and a more cooperative global order.

This is the logic behind the "Frontier Research and Science Diplomacy conference", recently organised by the European Research Council. This is also the logic that led to our Global Strategy for foreign and security policy, which I presented last summer and we are now turning into practice. It is a "global" strategy not simply in a geographic sense: it aims at a better use of all our foreign policy tools – starting with the traditional domains of diplomacy and defence, but also looking beyond them. The European Union is an economic, cultural and scientific superpower. Our potential is unrivalled, but it can only be fully exploited by acting together, using all our instruments consistently. In challenging times, this is absolutely vital.

We need science and research for our security. Investing in the most innovative technologies is crucial to a strong and credible European defence. For this reason, the Commission has just proposed to expand cooperation to develop new technologies in the field of defence, through incentives for Member States and European initiatives. The starting point is one of our most successful experiences, the Horizon 2020 programme. A continent-wide joint research programme on defence would be a natural extension of Horizon 2020.

But of course the link between science and our foreign policy does not simply concern the protection of our citizens and our partners. Research and innovation are essential to foster economic growth in developing countries. Moreover, science diplomacy is becoming integral part of our external action, as highlighted by our communication on cultural diplomacy: the "universal language of science" can build bridges across borders, beyond cultural, ethnic or religious differences.

I totally agree with my friend and colleague, Carlos Moedas, Commissioner for Research, Science and Innovation, when he says that science can be a compass in the current global disorder. Take the SESAME experiment in Jordan, supported by Horizon 2020: following on the experience of CERN, SESAME has brought together scientist from countries such as Iran, Israel and Palestine. An experiment in particle physics has turned into a successful experiment in peaceful regional coexistence. And more: scientific cooperation in the Arctic can help stabilise an area where there is much potential for collaboration as there is for competition. Understanding the root causes of conflicts over minerals in Africa can help devising more effective policies to tackle them.

Researchers and diplomats need each other. I have seen it during the negotiations on Iran's nuclear program, when we relied on the constant support of scientists and experts. Or to make another example, access to archaeological sites requires careful negotiations when they are located in fragile areas – from Afghanistan to Iraq, Libya and Syria. The safety of academics at risk and the support to scientific refugees are increasingly present in the diplomatic agenda, as it is the facilitation of mobility and visas to foster "brain circulation."

Our foreign and security policy needs the support of the scientific community, but it can and must also foster innovative research and scientific cooperation. Science diplomacy might sound like an obscure concept for many, but it will be increasingly relevant in our complex, contested and connected world. And the European Union is ready for making full use of its potential, both inside and outside our borders.

Federica Mogherini High Representative of the European Union for Foreign Affairs and Security Policy Vice President of the European Commission



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## Frontier research in science diplomacy



We live in a world with mounting tensions and global disorder. That is why it is topical to look at how bottomup frontier research can contribute to science diplomacy.

To explore this, the ERC hosted the conference Frontier Research and Science Diplomacy on 27 to 28 October. European Commissioner for Research, Science and Innovation Carlos Moedas and ERC President Professor Jean-Pierre Bourguignon, together with representatives from the UN, UNESCO, the European Parliament, science funding and advocacy organisations, as well as twelve ERC grantees took the floor. Overall, the conference welcomed 150 participants from 30 countries.

### The intersection of science and international relations

One of the ERC's contributions to promoting and practicing science diplomacy was illustrated that same day when Canada and the EU signed an international agreement on Canadian participation in ERC teams (see p. 8). The deal was signed moments before the conference, with President Bourguignon citing it as a concrete side of science diplomacy in his welcome address.

During his opening speech, as referred to in the editorial, Commissioner Moedas pointed out that today's "global disorder" is filled with threats and challenges of ever-increasing complexity. In this changing world, he stressed that cross-border collaboration among researchers is needed to come up with global answers to global problems and highlighted the ERC's role in this: "the ERC supports unconventional, fresh approaches to complex challenges". President Bourguignon added that "researchers, driven by their passion and competent

curiosity, can indeed contribute in the most appropriate way to a number of burning issues."

In the same session, Thomas Grass, UN Assistant Secretary-General for Policy Coordination and Inter-Agency Affairs, stressed how science helped in formulating the Sustainable Development Goals. Romain Murenzi, UNESCO Division of Science Policy and Capacity Building, made a strong link between research and human development and Anna Londsdale, Chair of the Council of at-Risk Academics, argued that scientists are at the forefront of the global disorder and protecting them is an important element of science diplomacy.

### From security to climate change

The presentations of frontier research occurred in five themed sessions. From climate change and sustainability to security and community building; ERC grantees and other high-level speakers introduced their work and addressed important questions. Mary Kaldor, ERC Advanced Grant holder considered amongst the leading advocates for science diplomacy in the EU, kicked off the first round of presentations on peace, democracy and security. As a member of the Human Security Study group, she informs EU diplomatic efforts on conflict management, advising Federica Mogherini, the High Representative of the EU for Foreign Affairs and Security Policy, on the European security strategy.

In the following session, ERC grantees Eystein Jansen (see p. 6), Michel Loreau and Michael Obersteiner explained how their work relates to fostering sustainable



development. The last remarked that science can make an invaluable diplomatic contribution by bringing hard data to the negotiation table to make it possible for countries to agree on climate change targets.

In the session on "Frontier research as a diplomatic practice: crossing boundaries and connecting communities", Starting Grant holder Avi Schroeder added a personal touch, presenting his story on how he assembled a team of Israeli and Palestinian researchers to jointly work on health issues. Sir Chris Llewellyn Smith, President of the SESAME Council and Starting Grant holder Licia Verde (see p. 7.), amongst others, showed how sharing knowledge through research infrastructures (e.g. telescopes and large databases) plays a crucial role in science diplomacy successes. The presentations by researchers confirmed the words of Angela Liberatore, Head of the ERCEA Social Sciences and Humanities Unit, who commented: "Science is not a cold practice. It comes with great passion for the advancement of knowledge and for what it can do for society."

### An understanding across nations and cultures

The conference concluded with a discussion on the role research organisations can play now and in the future, in the context of policy developments such as the Global Strategy on EU Foreign Policy presented by Alfredo Conte of the European External Action Service and DG Research and Innovation Director Cristina Russo. Zafra Lerman of the Malta Conference Foundation, Margret Wintermantel of the German Academic Exchange Service (DAAD) and Hamid Zoheiry of the Euro-Mediterranean University provided vibrant examples of bottom-up science diplomacy initiatives by scientists and universities to build bridges across borders.

The event showed that, by sharing experiences and resources, researchers greatly contribute to knowledge exchange and understanding across nations and cultures, in addition to providing sound evidence. In doing so, bottom-up frontier research contributes significantly to the effectiveness of more 'top-down' science diplomacy initiatives.



Mary Kaldor, ERC Advanced Grant holder, introducing her research on the security gap

Watch the opening speeches of the conference. To watch the full recordings of both days, see: day 1 - day 2. Check the official programme for more background information.

## Climate research at the core of international diplomacy



© Ice2Ice project

Flags on top of the Renland ice cap in East Greenland mark the multinational efforts.

Environmental challenges do not respect national borders, especially not climate change. In international politics, global warming is increasingly at stake and countries across the world acknowledge today the pressing need to join forces. Behind the political scene, researchers play a key role in trying to predict and better understand the impact of climate change. Professor Eystein Jansen, focusing on the impact of the Arctic sea ice melting, is one of them.

"We need more fundamental research to assess our climate future" urged Prof. Jansen during the ERC conference Frontier Research and Science Diplomacy. "We need to tackle those many complex and unsolved issues that are critical for assessing climate impact and the risks and thresholds, or tipping points, involved".

With an ERC Synergy Grant, Prof. Jansen and three Nordic world class researchers are currently investigating the dramatic loss of Arctic sea ice. This phenomenon controls abrupt variations in past and future temperatures, as well as the formation of ice sheets, in Greenland. These rapid changes have been detected in past records, but it is still unclear whether, and at which climate thresholds, the next event might occur.

The research teams use an innovative combination of synchronised records of Greenland Ice Sheet parameters; records of sea ice change; and different climate and process models. "Without this knowledge, we might not be able to adequately address the urgency of climate action, as sea levels could rise much more rapidly than what we have anticipated so far in our models", explains Prof. Jansen, who is based at the

Bjerknes Centre for Climate Research, University of Bergen, Norway.

According to Jansen, climate diplomacy is closely linked to the ongoing processes in the Arctic, and the results of the ERC project Ice2Ice can help in warning policy makers about the pressing situation in the area: "Studies indicate an influence on the weather and climate patterns at lower latitudes. If we do not manage to implement the <u>Paris agreement</u>, we will create tremendous problems for humanity today and for many future generations to come".

In a geopolitical context, Jansen explained, the situation will become more complex, highlighting the need for scientific cooperation: "Diminishing sea ice cover increases the importance of the region. Trans-arctic transport routes will open up, while an increase in economic activity related to fisheries and the extraction of resources can be expected. We also need to take into account the unresolved territorial boundaries and the intensifying Russian military presence".

Researchers: Eystein Jansen, Jens Hesselbjerg Christinsen, Kerim Hestnes Nisancioglu, Bo Møllesøe

**Host institution:** Universitetet i Bergen, Norway

Project: Arctic Sea Ice and Greenland Ice Sheet

Sensitivity (Ice2Ice)

ERC call: Synergy Grant 2013

**ERC funding:** EUR 12.5 million (2014-2019)



Eystein Jansen

# An expanded understanding of the universe



"The sky is the limit" does not hold true for Professor Licia Verde, who received an ERC Starting Grant in 2009 to explore some of the biggest questions in space science, such as the origin and the continuous expansion of the universe. At the ERC conference "Frontier Research and Science Diplomacy", she shared some of her research findings in cosmology, explained why the mysteries of the universe deepened, and described how Einstein might not have had the last word on gravity.

### In brief, what was your research about?

The main aim of the project was to unravel the physics behind the accelerating expansion of the universe. As in astronomy in general, my research is based on observations of the sky. The latest large-scale galaxy surveys of different international collaborations have yielded unprecedented data which suggest that new physics is likely to be involved in the ongoing acceleration. This could mean a change in our understanding of space and time as Albert Einstein described in his General Relativity laws. Therefore, the mystery about the functioning of the universe deepens. In order to correctly interpret these observations and link them to theoretical predictions, we need to improve the modelling of cosmological data, and thus extract information about fundamental physics, which is what my research team has been working on during these last five years.

### How did you get interested in cosmology?

Do you really want to know the truth? When I was learning to read, I was around six years old, somebody gave me a book about the sky and the universe, and since then I have been booked

#### Have there been any surprises during your research?

About three years ago, data from a big space mission was about to be released. The entire astronomical community was

very excited about finding big deviations from what is defined as the standard model of the beginning of the universe. But then, on the day that the results were announced, there was nothing exceptional to be found in the data. That changed the research direction for many in the field, as well as for me.

## How is diplomacy affecting the research you are conducting?

In cosmology, we not only work in large international teams, but we are also relying on data from research facilities located in very remote places on this planet. In order to reduce the effects the atmosphere has on our observations, such as blocking some of the wavelengths of light, we can only install telescopes in a handful of geographically suitable locations. We as researchers always need to be highly sensitive towards the local population living in close proximity to those sites. We should try to avoid 'parachute' research where we only make use of the land, but have no positive impact locally.

## 'High risk, high gain' research is what the ERC seeks to fund. Would you say this holds true for your project?

Yes, definitely. In astronomy, major discoveries are unplanned, unscripted, and the ERC is the only organisation that supports blue sky thinking on such a large scale.

Researcher: Licia Verde

Host institution: Universitat de Barcelona, Spain

Project: Cosmological Physics with future large-scale

structure surveys (PHYS.LSS)

**ERC call:** Starting Grant 2009

**ERC funding:** EUR 1.4 million (2009-2015)



# More overseas talent able to join ERC teams



"The main reason to come to Europe was the ERC grant" – Prof. Elison Matioli

In October, the ERC launched initiatives with both Brazil and Canada for scientists to be part of ERC-funded teams in Europe. This resonates with the ERC's original mission to make Europe a hub for top scientific talent and with the strategy "ERC – Open to the World". By broadening its outreach in North and South America, the ERC further fosters collaboration amongst top researchers from around the world and helps in shaping an increasingly global role for scientific excellence.

Such so-called <u>Implementing Arrangements</u> are already running with several countries across the globe: US, South Korea, Argentina, China, Japan, South Africa and Mexico. Thanks to these agreements, scientists who are based outside Europe and are supported by non-European funding agencies can temporarily join research teams led by ERC grant holders.

On 13 October, the agreement was <u>signed</u> by the President of Brazil's National Council of State funding Agencies (CONFAP), Sergio Luiz Gargioni, and European Commissioner Carlos Moedas, in the presence of ERC Scientific Council Vice-President Prof. Klaus Bock, who said: "We are very pleased with this new addition to the many international initiatives launched with our counterparts around the globe over the last few years. It is clear to the ERC that scientific talent needs to interact and work closely together. Scientific exchange at top level is extremely valuable and may well lead to further scientific advancements which will benefit all." Commissioner Moedas said he felt honoured to sign this implementing arrangement and remarked it was a fantastic day for the European Union and Brazil, emphasising that research and science should be open to the world. (Watch the signing ceremony)

Following the signature, ERC grantee Elison Matioli showed how many doors international cooperation can

open. Following his BA in Brazil, he studied and worked at Ecole polytechnique Fédérale de Lausanne, University of California and MIT. In 2015, an ERC grant brought him back to Europe, to Lausanne, where he is now developing nanotechnologies to make energy conversion more efficient.

An <u>agreement</u> with Canada followed on 27 October, appropriately, moments before the ERC's <u>Science Diplomacy conference</u> kicked off. The initiative with the Canadian tri-agency Institutional Programs Secretariat (TIPS) was signed by President of the Social Sciences and Humanities Research Council (SSHRC) Ted Hewitt and European Commissioner Carlos Moedas. Also in attendance was ERC President Jean-Pierre Bourguignon, and the President of the Natural Sciences and Engineering Research Council (NSERC) of Canada, Dr Mario Pinto. In an <u>interview</u>, Ted Hewitt revealed the early beginnings of this agreement in Paris, when he discussed it with President Bourguignon on a park bench on the fringes of a conference.

Hewitt further commented: "Both Canada and the EU recognise that science and innovation are key to defining the parameters of a better, healthier and more prosperous planet, and that collaboration between our researchers is essential to our mutual long-term economic growth and prosperity". Additionally, he also reminded that 2016 marks twenty years of Science and Technology cooperation and forty years of diplomatic relations between the EU and Canada. (Watch the signing ceremony)

Cross-border collaboration is needed to continue pushing the frontiers of knowledge and talks to launch more agreements are currently underway.



From left to right: NSERC President Pinto, SSHRC President Hewitt, Commissioner Moedas and ERC President Bourguignon at the EU-Canada signing ceremony.

## The Return of Synergy Grants



They are strange creatures at the ERC: they are bigger, they last longer and they can have up to four heads. And when they appeared in 2012 and 2013, they were much in demand. Now they are set to make a comeback.

The ERC Scientific Council decided to reinstate the Synergy Grant funding scheme in the 2018 Work Programme. The ERC ran two pilot calls for Synergy Grants in 2012

and 2013. This specific type of "These grants help funding shared many key features of ERC grants: frontier science, to put European excellence as the sole criterion science at the of selection, and bottom-up, global forefront." investigator-driven research. As opposed to the main ERC grants Jean-Pierre Bourguignon for individual researchers, they ERC President brought together up to four top researchers with complementary skills and knowledge to enable

them to jointly address a challenging research problem in unconventional ways. Synergy Grants were intended to support solving major scientific issues, which scientists would not be able to achieve by working alone. The grants were also bigger - €10 million and in some cases more and could last up to six years. However, in these pilot competitions the demand exceeded by far the €150 million per year allocated to the scheme. In total, the ERC received more than 1,100 proposals, but could only fund 2% of them.

In 2014, the Scientific Council established an ad hoc group tasked with assessing the outcomes of the two pilot calls and all the 24 funded projects. After a year the group reported back, recommending reinstatement of the grant scheme and allocating to it at least €250 million annually.

The conclusion was that such grants would be a valuable addition to the main ERC funding schemes.

"The Synergy Grants awarded so far have shown that this funding fosters interdisciplinary research and can trigger unconventional collaborations, allowing for the emergence of new fields of study. They will contribute significantly to fill a gap in EU funding for frontier research," said ERC President Jean-Pierre Bourguignon.

The future Synergy Grant call for proposals, including its budget, dates and eligibility criteria, should be published in the 2018 ERC Work Programme to be adopted by the European Commission in 2017, and established by the Scientific Council.

### Synergy Grants in brief

- Enable a small group of Principal Investigators (2-4) and their teams to bring together complementary skills, knowledge and resources in new ways, in order to jointly address research problems.
- Intended to promote substantial advances at the frontiers of knowledge, and to encourage new productive lines of enquiry and new methods and techniques, including unconventional approaches and investigations at the interface between established disciplines.
- The ERC review panels were asked to assess whether the proposals demonstrated the synergies, complementarities and added value that could lead to breakthroughs that would not be possible by the individual researchers working alone.

## Slovenia

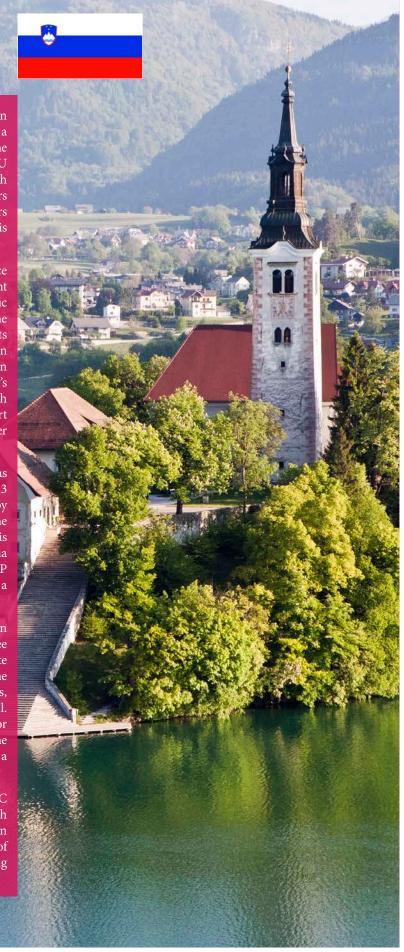
A small country of around 2 million people, Slovenia has recently hosted a series of meetings in the framework of the participation and performance of newer EU Member States (EU13) in European research funding competitions. Recently, ERC leaders took part in events to get to know researchers around universities and institutions in this central-European nation.

Slovenia is a country with a diverse science landscape. A visit in June took ERC President Jean-Pierre Bourguignon and ERC Scientific Council member Eva Kondorosi to the National Institute of Chemistry to celebrate its 70th anniversary, as well as to the Jožef Stefan Institute and the University of Ljubljana. On this occasion, they met with the country's Prime Minister Miro Cerar, as well as with Minister for Education, Science and Sport Maja Makovec Brenčič and several other ministers.

On 2 December, Slovenia was chosen as location for a regional conference of the EU13 countries, an initiative brought together by the ERC, the national government and the Slovenian Research Agency (ARRS). This shows a clear commitment from Slovenia that currently invests around 2% of its GDP in scientific research but that aims to reach a target of at least 3% in the coming years.

So far, six Slovenian researchers have been awarded ERC grants. Of these, only three are hosted at Slovenian institutions, despite almost 300 applications. These are one Starting Grant and two Advanced Grants, amounting to around EUR 4 million in total. In 2010, the ERC Complementary Scheme for Slovenian researchers was introduced by the Slovenian Research Agency to encourage a rise in applications.

Whilst nationality does not matter in the ERC peer review evaluation committees, it is worth noting that Slovenia has a good representation in these panels: 16 representatives, at the top of their field of expertise. This is an encouraging figure in comparison to other countries.





### Three questions to the Slovenian National Contact Point, Dr Andreja Umek-Venturini

## Could you please describe the Slovenian research landscape? Is there any particular research area in which the country stands out?

In Slovenia, the responsibility for research policy is held by the Ministry of Education, Science and Sport. A majority of public research funding is managed by the Slovenian Research Agency, whereas innovation funding is managed by another agency named SPIRIT Slovenia. The research landscape in Slovenia is very diverse. It consists of four universities, 15 public research institutes covering various fields of expertise and more than 600 R&D units in the business sector. In addition, eight Centres of Excellence, based on partnerships between the private sector and academia, were established with the support of Structural Funds, these are important from the perspective of the larger research equipment needed.

One of the targets of the "Research and innovation strategy of Slovenia 2011-2020" is the encouragement of frontier research. Unfortunately, with the financial crisis in the past years, the execution of this strategy was slowed down and we have not yet achieved the target of allocating 3% of our national GDP to R&D activities. However, the situation with public investments in R&D is starting to improve and we hope to get closer to the target in the following years.

## To what extent are the ERC funding schemes important to researchers in the country?

Slovenia is participating in the Horizon 2020 programme quite successfully, especially in ICT, Energy, and Marie Skłodowska Curie Actions. This is not the case in ERC calls. Slovenia currently hosts three ERC grants, one Starting Grant and two Advanced Grants. The oldest Slovenian university, University of Ljubljana, is hosting both Starting Grant holder Nedjeljka Žagar and Advanced Grant holder Tomaž Prosen. The biggest public research institute,

Institute Jožef Stefan, is hosting Advanced Grant winner Dragan Mihailović. All three scientists are physicists, but it should be said that Slovenia-based applications from other disciplines received high scores as well. The ERC grants gave these scientists more freedom to follow their research curiosity and the possibility to engage students and young researchers with excellent research projects.

## How do you encourage researchers to apply for ERC grants?

Since one of the priorities is frontier research, the Ministry is actively encouraging Slovenian applications to ERC grant competitions. We organise different information events and advise applicants during the preparation stage of the proposals. The low success rate of Slovenian applications has been noticed early on. In 2010, the Slovenian Research Agency therefore introduced the ERC Complementary Scheme for Slovenian researchers who had reached a certain threshold in the ERC evaluations, but did not receive funding. The scheme, in the form of a two to three year project, is considered the right approach to support re-applications, since two out of three grantees based in Slovenia used this scheme before receiving their ERC funding.

The Slovenian applications are slowly improving. For that reason, Slovenia welcomed the ERC's appeal earlier this year to set up a fellowship programme to allow future ERC applicants to visit research teams of existing ERC grantees. Just recently, the Slovenian Research Agency published a call for (co)financing potential ERC candidates to visit ERC grantees. These three- to six-month visits will offer researchers in Slovenia valuable insights into top frontier research and consequently help them to prepare more competitive proposals.



## President of Ireland praises ERC



A traditional warm Irish welcome was given to the ERC Scientific Council when it <u>visited</u> Dublin in October. The two-day Scientific Council plenary session was held there to engage with the Irish research community and policymakers. To mark the occasion, the President of the Irish Republic, Michael D. Higgins, addressed the ERC delegation during an official dinner in Iveagh House, the headquarters of the Department of Foreign Affairs and Trade. He commended the role of the ERC in Europe, with some examples of his words presented below. The full speech is available <u>online</u>.

It is my great pleasure to be addressing this dinner of the Scientific Council of the European Research Council, an institution that plays such an essential role in sustaining our European tradition of intellectual freedom, curiosity and excellence.

The work of the European Research Council is faced with great challenges. Indeed we are challenged, not just to secure understanding and support for a science appropriate to the great issues of our time, such as climate change and sustainable development, but also to protect the long vision and the atmosphere needed for the freedom of fundamental science to wonder and discover.

(...

Research with intended and tangible applications is, of course, immensely worthwhile. Yet public funding for the applied research we need should never be at the expense of investment in basic research. So many of the inventions that have revolutionised our daily lives (for the better or the worse) are the product of basic research, even serendipitous discovery, with no direct application.

*(...)* 

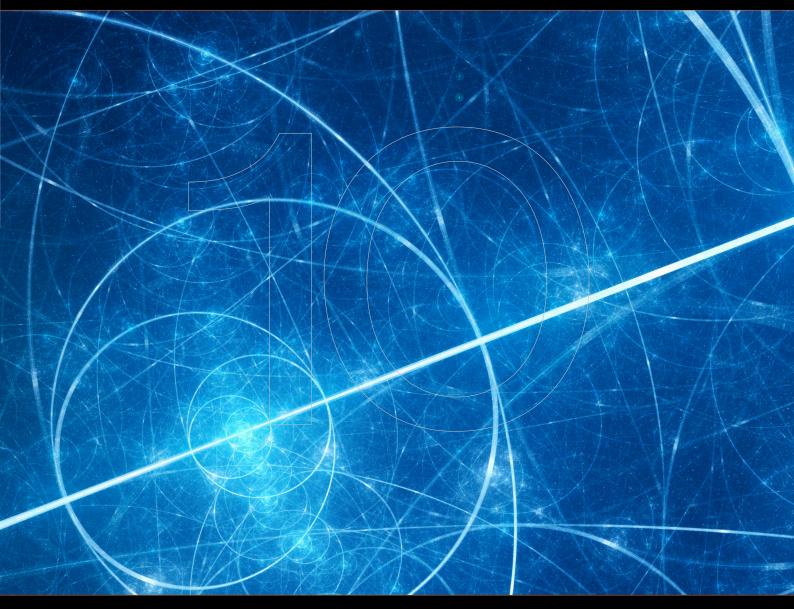
If we truly want Europe to be a cradle of innovation, it is vital, therefore, that we continue to support exploratory research at, and beyond, the frontiers of understanding. This means sustaining firmly, in all of our respective countries, that bedrock of basic research from which all scientific breakthroughs spring.

...)

It is through leaping the boundaries that divide discipline from discipline, science from the arts and humanities, and by marshalling the diverse influences from our intellectual heritage that we can best meet the complex challenges of the future, learn to live, and try to love.



## Beyond the first 10 years



#ERC10yrs



### ERC Consolidator Grants to 314 top researchers

he ERC <u>announced</u> the results of the 2016 Consolidator Grant call in which 314 mid-career researchers received some €605 million in total to fund their projects; from new regenerative therapies for heart disease to a better understanding of how illicit markets work. Researchers of 39 nationalities received grants and they will work in 23 countries across Europe, with the United Kingdom (58 grants), Germany (48), France (43) and the Netherlands (29) as leading locations. Twenty-eight percent of grants were awarded to female applicants.





### ERC at the ASCB annual conference

small ERC delegation crossed the Atlantic for the American Society of Cell Biology (ASCB)Conference in San Francisco from 3 to 7 December. ERCEA Research Programme Officer Mariam Benjdia explained the funding opportunities in a dedicated workshop. ERC grantees Hyun Oh Youk and Anne Bertolotti shared their experiences and both Mariam Benjdia and Jhansi Kota, fellow ERCEA Research Programme Officer, gave valuable tips to potential applicants. Most Europeans met at the ERC booth knew about ERC funding and the ERC presence attracted lots of interest from the 4,000 conference participants.

### Nobel Prize awarded to ERC grantee Ben Feringa

RC grantee Ben Feringa was awarded the Nobel Prize in Chemistry in Stockholm where, in his Nobel lecture, he stressed the importance of the ERC for basic research: "[ERC] generously supports us with funds for fundamental science which is so crucial for this kind of work; laying the foundations for technologies of 30/40/50 years from now." Together with fellow Chemistry laureates Professors Jean-Pierre Sauvage and Sir J. Fraser Stoddart, both EU-funded, Ben Feringa received his medal from the hands of HM the King of Sweden in a festive ceremony, which both European Commissioner Moedas and ERC President Bourguignon attended.





### **ERC President at European Parliament**

RC President Jean-Pierre Bourguignon attended a Horizon 2020 Working Group meeting of the Committee on Industry, Research and Energy (ITRE) in the European Parliament in Brussels on 8 November. He gave a speech in which he reminisced about the ERC's early days, shared future plans and stressed the impact of ERC grants on the advancement of fundamental research. ERC grantee Valeria Nicolosi also attended to present her breakthrough research on 'two-dimensional' nanomaterials and stressed that ERC funding helped build her team: "I would not be where I am now without the ERC".



## Calendar of ERC calls

## Grants open to researchers from anywhere in the world

Call for proposals*	Publication date	Deadline	Budget	Funding
ERC 2017 Proof of Concept Grant**	5 October 2016	19 January 2017 25 April 2017 5 September 2017	EUR 20 million	Up to EUR 150 000 per grant
ERC 2017 Consolidator Grant	20 October 2016	9 February 2017	EUR 575 million	Up to EUR 2 million per grant
ERC 2017 Advanced Grant	16 May 2017	31 August 2017	EUR 567 million	Up to EUR 2.5 million per grant

<sup>\*</sup>Researchers who wish to apply to one of the ERC calls can do so through the Participant Portal.

For more information regarding ERC Proof of Concept grants, please see the <u>ERC Work Programme 2017</u> (pp 36 - 42) Candidates should apply with a host institution in an EU Member State or a Horizon 2020 Associated country. See further information on the <u>Participant Portal</u>.

Stay informed on the ERC website and the Participant Portal.

### Information on the ongoing selection:

• In the 2017 ERC Starting Grant call, 3,081 applications were submitted. The application number rose about 5% compared to the 2016 Starting Grant call which included 2,935 submissions.



<sup>\*\*</sup>Call open to ERC grantees only.



**European Research Council** 

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