ideas

Newsletter of the European Research Council



## What's on Backing the best: from young talent to Nobel minds



## Changing of the guard

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Focus on Portugal

**European Research Council** 

## **Research in the spotlight**

Daring ERC research at TEDx



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2014 • #4 (December)





Getting Europe back on track – that's the objective of this brand new Commission. Keeping Europe at the forefront of research and innovation will be a huge part of reaching that goal - a task I took on unreservedly a few months ago.

To develop home-grown research and innovation to its full potential, I made a firm commitment to improve the conditions for European research. That is why I will do everything in my power to ensure Horizon 2020 is implemented effectively and efficiently, as a solid basis for the investment and political cooperation still needed.

We can achieve much more as a hub for world-class talent. A hub for talent from across Europe and beyond. The European Research Council, of which I am a great supporter, is pivotal in this regard. The ERC nurtures scientists, making it more worthwhile to initiate research in Europe. There are already 4,500 ERC grantees so far. Two thirds are emerging leaders in research.

The ERC also resonates with my belief that we should not be afraid of risk. "A *ship is always safe at the shore, but that is not what it is built for*", as the saying goes. In a risk-averse culture, people go for 'safe bets', which do not lead to progress. By daring to explore the unknown and accepting failure, we broaden our horizons; stretch the limits of our understanding; and break new ground. Europe needs to get comfortable with this fearless mindset.

It is what the ERC stands for - backing curiosity-driven research that is high-risk and high-gain. Science at its best, making discoveries that improve people's lives happen. These things cannot be planned. Serendipity often plays a key role. The ERC's bottom-up approach, gives top researchers free rein to explore without clipping their wings by imposing policy priorities. By committing to excellence, the ERC funds the very best researchers and their pioneering ideas.

With last week's Nobel Prize ceremony fresh in mind, the most topical examples illustrating this are the three ERC grantees among this year's winners. I would like to congratulate Professors Edvard Moser, May-Britt Moser and Jean Tirole on their tremendous achievement, and the ERC for having identified their innovative work some years back.

Let me also take the occasion to pay tribute to my Commission predecessors and the ERC leaders, past and present - I am eager to build on their laudable work. I will make it my mission to ensure European science thrives and to guarantee that the ERC's invaluable mission, as well as its independence, continues.

Carlos Moedas European Commissioner for Research, Innovation and Science

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### What's on

#### Backing the best: from young talent to Nobel minds.



Last week, all eyes turned to Stockholm as some of the brightest minds of our times took centre stage at the solemn Nobel Prize ceremony. It was a glorious occasion for the ERC, as this year three ERC grant holders were distinguished with this highest scientific prize. Hopes are high that Europe will prove fertile ground for more and more Nobel laureates in the years to come. However, the ERC is not all about funding established top scientists; on the contrary, the lion's share of its funding is earmarked for the younger generation of researchers, giving them scientific independence at an early stage and encouraging them in their scientific curiosity. This enriches Europe's research base, and, who knows, may in turn spark new breakthroughs of Nobel caliber.

As announced on 6 October, Professors Edvard I. Moser and May Britt Moser shared the Nobel Prize in Medicine or Physiology with Prof. John O'Keefe for their discovery of the brain's 'GPS system'. Then, a week later, news broke that Prof. Jean Tirole had won the award in Economic Sciences for his lifetime work on examining competition and analysing monopoly behaviour. All of them hold ERC Advanced grants. ERC President Prof. Jean-Pierre Bourguignon expressed that this news "confirms that the ERC invests in the best minds – whether young or senior - to support their most innovative ideas at the cutting edge."

#### Celebrating world-changing research

The world's attention was directed towards the winners in early December, when the formal festivities took place. During the "Nobel week", they presented their research and explained their breakthrough ideas.

In his scientific Nobel lecture, Prof. Tirole talked about how he and his colleagues, since the early 80s, have strived to rebuild "*the antitrust and regulation doctrine* [which] *was in shambles*". Professors Edvard and May Britt Moser - a pair both in the lab and in life - explained how they have been trying to "*unlock the mystery of three pounds of matter that sits between our ears*". In a recent interview, they also spoke about the origin of their great passion for science. Prof. Edvard Moser got hooked on science as a child when he wanted to dig up dinosaurs, whereas his wife's interest came from her childhood curiosity about people and animals around her. The highlight of the week was the award ceremony on 10 December, the 118th anniversary of Alfred Nobel's death. On that day, the laureates in the scientific disciplines and literature arrived at the splendidly decorated Stockholm Concert Hall to receive the coveted gold medals, presented by the King of Sweden, Carl XVI Gustaf. A distinguished audience was present at the event, including former Nobel Prize winners, world-renowned researchers, the Swedish royal family, policy-makers as well as the awardees' family members.

The ceremony was followed by a banquet, during which some of the laureates gave speeches. Prof. John O'Keefe, who also spoke on behalf of his co-winners, noted that thanks to technological development, cognitive neuroscience is entering an exciting era in which it might become possible to gain better understanding of the human mind and brain diseases.

In his speech, Prof. Tirole focused on the value of humility in the work of a researcher. When the prize was announced, he also acknowledged the ERC's impact on his research. "*The ERC grant has been a* 

crucial support in helping me to embark on several pioneering research projects on the role of cognition in decision-making. Thanks to the grant, I have been able to go beyond the boundaries and foster long-term collaborations with colleagues across the globe. I am very grateful for this opportunity, and would like to thank the ERC sincerely for their support", he said.

#### En route to the greatest benefit to mankind

The first Nobel Prizes were awarded in 1901, five years after the death of Alfred Nobel, a Swedish-born inventor and industrialist who discovered dynamite. In his will, he famously dedicated his entire fortune to establish a prize in the fields of chemistry, physics, physiology and medicine, peace, and literature, to be awarded to those who "*shall have conferred the greatest benefit on mankind*". In 1968, the Swedish Central Bank funded the Nobel Prize in Economic Sciences, to celebrate its 300th anniversary. So far, 567 Nobel Prizes have been awarded to 889 laureates, including personalities such as Niels Bohr, Albert Einstein, Doris Lessing, Martin Luther King Jr. and Marie Skłodowska-Curie.





#### ERC's drive for funding excellence

To date, five ERC grantees have been bestowed with the Nobel Prize. In 2010, the award went to ERC Starting grant holder Prof. Konstantin Novoselov - one of the youngest laureates - for his role in the discovery of graphene. Two years later, ERC Advanced grantee Prof. Serge Haroche was awarded the prize for his studies on quantum phenomena. This year, three out of five European laureates in the science fields are ERC-funded. They are co-winners of two of the four scientific Nobel prizes.

This suggests that the ERC has managed to identify and fund scientific excellence – that is, top researchers who truly extend the frontiers of knowledge and who contribute to ground-breaking discoveries. As Prof. Tirole noted, "the beauty of the ERC philosophy is its focus on independence, allowing researchers the freedom to carry out exploratory research without thematic restrictions, leading to true innovations with a positive impact on society. Moreover, excellence is guaranteed thanks to peer reviews by independent panels composed of top researchers. In short, the ERC is a vital mechanism for promoting first-class research in Europe."

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As the ERC's priority is to nurture promising researchers at an early stage of their careers, two thirds of the ERC budget is dedicated to young talent; Starting and Consolidator Grants target researchers with two to twelve years of experience after their PhD. This helps them develop their full potential and become the next generation of scientific leaders.

Last week's ceremony emphasised the strength of European research, fed by the ERC's drive to fund excellence. This bodes well for the future. Funds at the European level, combined with national efforts to provide first-class research environments and backing, may well lead to even more European researchers receiving accolades.



# 2014 Nobel Prize





Prof. Edvard Moser's research has been funded by the ERC since 2008 with two consecutive Advanced grants: CIRCUIT in 2008 and GRIDCODE in 2013. With his ERC funding, Prof. Moser has studied the functionality of "grid cells", i.e. the neural cells activated during spatial navigation, by switching them 'on' and 'off' and testing how it affects the firing of nerve cells in rats.



Prof. May-Britt Moser received an ERC Advanced grant in 2010. Her project, ENSEMBLE, focuses on the hippocampus, a region in the brain responsible for memory formation. The goal is to identify key principles for the dynamic representation and retrieval of episodic memory in the mammalian hippocampus, which could, for example, help to better understand early memory deficits in infantile amnesia.



Prof. Jean Tirole has been funded by the ERC since 2009. In his Advanced grant project, COGNITION, he explores how motivated beliefs (values and views which affect how we perceive the world) and cognitive costs (i.e. discomfort which appears when the perceived value of something is lower than the costs we need to bear to have it) can affect the decision-making process.

#### Research in the spotlight

#### ERC grantees reveal daring research at TEDx





Prof. Christopher Pissarides

Do you know how to produce graphene in a kitchen blender? Will invisibility cloaks soon become a reality? Why generate tsunamis? These were some of the questions addressed by ERC grantees at the recent TEDx Brussels conference, an event described by some as the 'ultimate brain spa'.

On 1 December, *Bozar* in Brussels hosted 27 captivating speakers, selected to share their best ideas with 2,000 audience members. <u>TEDx Brussels</u> has also been live-streamed and the talks have been shared on YouTube, reaching millions of online viewers, since its launch in 2009. The theme of this year's event, '*The Territory and the Map*', alluded to exploring new, unknown areas and placing them on the map of human understanding.

Speakers were ranging from artists, inventors and entrepreneurs to business magnates and politicians. They had twelve minutes each to enchant the audience with their presentation. The line-up included: a ballerina investigating how to make more ergonomic pointe shoes, a politician who advocated a system for global governance, a Silicon Valley entrepreneur presenting a concept of artificial intelligence, and a renowned cello-soloist. The conference was also a platform for scientists, including five ERC grantees, to present their cutting-edge research. Their talks have been covered by many media outlets, for example <u>RAI TV, BBC International</u> and <u>The Independent</u>.

<u>Prof. Christopher Pissarides</u>, an ERC Advanced grantee and Nobel laureate in Economic Sciences, took the stage in the opening session to talk about *'The Future of Employment in Europe'*. He immediately

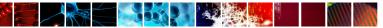
caught the audience's attention by saying "It's possible to end up with a lower unemployment rate than in the 20th century". Prof. Pissarides stressed the importance of creating new jobs in services, particularly in healthcare, education and community services. Europe's ageing population will require a larger workforce in services offered to the elderly, including medical and home care, he explained. Furthermore, as Europeans spend ever more time at work, and are therefore increasingly eager to hire someone to help take care of the home and family, other community services will also become more important. Prof. Pissarides advocated encouraging high wages and liberalising new employment sectors to make them more attractive to young Europeans. He also called for establishing a new education system, in which students would acquire both traditional knowledge, and learn valuable social skills.

After the second session, in which five Silicon Valley entrepreneurs spoke out for the unleashing of great ideas, the time had come to present stunning research. A magician opened the floor by entertaining the audience with tricks incorporating technology – being 'sucked in' to a screen before reappearing in the audience playing the clarinet, for example. This was a perfect introduction to the incredible, sci-fi-like research presentations which followed.

First on the stage came <u>Prof. Ulf Leonhardt</u>, ERC Advanced grantee, who studies optics to create the ultimate illusion: invisibility as a cloaking device. He opened his presentation by asking the simple question: what is it to really 'see'? By giving an example of an aquarium, in which we see fish in places other than where they are actually located, he explained how our images can be distorted by the way the light is absorbed. In his research, he uses this phenomenon to send light waves around objects to make them disappear. Based on a similar principle, objects could also be 'hidden' from other waves, such as seismic waves created during an earthquake.

Next under the spotlight was ERC Starting grantee <u>Dr Laura Robinson</u>, who took the TEDx audience on a journey to the bottom of the Atlantic to show how corals can help measure climate change. Dr Robinson and her team boarded the James Cook vessel for a





seven-week cruise covering an area of 70,000 km<sup>2</sup> to collect deep-sea corals, some of which thousands of years old. By analysing the samples' chemical composition, the researchers were able to determine how the temperature and  $CO_2$  saturation of the ocean have been changing over the past 30,000 years. The findings show that changes in global temperature and  $CO_2$  levels have not happened consistently, but rather in 'jumps'. This knowledge can help scientists better predict the future of the ocean's environment.

Prof. Tiziana Rossetto began her talk on tsunami research by citing some startling statistics. Over the last ten years, five major tsunamis have killed 300,000 people. Today, around 150 million people are at risk from tsunamis. Prof. Rossetto is studying this natural phenomenon to learn how to construct efficient sea defence systems. For this purpose, she and her team have designed a tsunami generator to simulate these extremely long waves in order to better understand their horizontal force and its damaging impact on buildings. At the beginning, the researchers constructed a 45-meter-long and 4-meter-wide flume consisting of a tank with a fan, which can suck in the air to create a 170 second-long model wave, the equivalent of a 20 minute-long tsunami. The ERC Starting grant allowed Prof. Rossetto to build an even bigger generator, capable of creating models of more realistic, 30 to 40 minute-long tsunamis, and study their impact on clusters of buildings.

The last ERC grantee to showcase his 'magic' research was <u>Prof. Jonathan Coleman</u>, who demonstrated that "*nanoscience doesn't have to be complicated or hightech*". He showed how to make graphene – an atomthick material with unique electronic properties, which can be used for complex electronic devices – at home. On stage, he and his colleague used a simple kitchen blender to mix graphite powder from a pencil, water and washing-up liquid to produce the world's wonder material, which has been revolutionising nanoscience since its discovery in 2004. Prof. Coleman and his team have created this simple recipe in a bid to develop a technique to produce graphene on an industrial scale.

The five ERC grantees' excellent talks are clear examples of how our understanding of the world is being remapped before our eyes. At TEDx Brussels, their stories were not only heard by fellow scientists, but sparked the imagination of everyone.



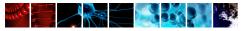


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Prof. Jonathan Coleman and Dr Keith Paton



#### Changing of the guard

#### Message from outgoing ERC Vice-Presidents

In January, the ERC will say goodbye to Professors Pavel Exner and Carl-Henrik Heldin, ERC founding members who have led the ERC Scientific Council as its Vice-Presidents since 2011 with passion and wisdom. Before their term of office will come to an



Prof. Pavel Exner, ERC Vice-President responsible for the domain of Physical Sciences and Engineering, is a renowned mathematical physicist heading the Doppler Institute for Mathematical Physics and Applied Mathematics in Prague, Czech Republic. Author of

three books and over 200 academic publications, he will assume the post of the President of the European Mathematical Society in January 2015.

## ERC: Please tell us about the ERC during your membership and vice-presidency.

**PE:** Being a member of the Scientific Council which founded the ERC was a unique experience. One October day in 2005, twenty two of us met and were asked to create a funding system based only on excellence, and we had sixteen months to make it work. These were the only instructions. It was a challenge indeed, but also something one can be proud of - considering the efficient functioning of the ERC's machinery today. For the last three and a half years, I have been honoured to serve as an ERC Vice-President. These years have been as different from the first years as, say, childhood from early adolescence. We passed from a steep growth to a period when the budget has become more restrictive, and we are no longer as new and 'exotic' to the scientific community and the European institutions. Nevertheless, the vision and determination of the first years remain, and I firmly hope that our successors will keep and nurture this spirit.

The ERC wishes the two Vice-Presidents all the best in the future, and thanks them for their dedication (over the past years).

end, they share their insight into the ERC. Drawing from past experience, they jointly wish that the ERC remains independent and committed to scientific excellence.



Prof. Carl-Henrik Heldin, ERC Vice-President responsible for the field of Life Sciences, is a director of the Ludwig Institute for Cancer Research in Uppsala (Sweden), and a laureate of several prestigious scientific prizes. His plans for the future include continuing his research

in the cancer area and serving as the Chair of the Board of the Nobel Foundation, among others.

# ERC: In your opinion, what are the biggest challenges ahead of the ERC?

**C-H H:** A major challenge for the ERC will be to live up to the expectations of scientists and stakeholders across Europe. Establishment of the ERC has been much appreciated and the ERC has already made a very positive impact on European research. The demands on the ERC are increasing, however, particularly since many countries in Europe are now cutting national research funding. In view of this, it will be a challenge for the ERC to fulfill its important role with a budget that is lower in 2014, 2015 and 2016, compared to the 2013 budget.

Another challenge will be to maintain and consolidate an appropriate independence from the Commission. The ERC's mission is to fund curiosity-driven frontier research in a 'bottom-up' manner with excellence as the only evaluation criterion. In this respect, the ERC differs from other instruments for research funding within the EU. In order to function well and fulfill its mission, the ERC must have the freedom to develop the evaluation procedures and to manage grants in line with what is suitable for its needs.

It is also time to warmly thank two outgoing members of the ERC Newsletter Editorial Board, Professors Danny Dolev and Pavel Exner.



### ERC wider impact

#### Boosting international cooperation through integrated research funding

How could national funding agencies collaborate? By which means can the mobility of researchers be fostered? The 6th ERC annual workshop for funding agencies provided not only more than a dozen talks addressing such questions, but also served as a forum for animated debates. During the event, on 13 and 14 November, over 80 participants from Europe and beyond discussed how to internationalise research and help scientists exchange their knowledge and experience.

The workshop, led by Head of the ERC Scientific Department Dr Jose Labastida, demonstrated the added value of international collaborations. The scene was set by Stephan Kuster from <u>Science Europe</u> who showed that the impact of a publication increases if it is written by researchers collaborating internationally.

In another session representatives from national funding agencies shared their experience of biand multilateral agreements. For example, Austria, Germany and Switzerland allow researchers to apply for national funding with a joint project. Another example came from the <u>Research Council UK</u>, which cooperates with several countries overseas to help scientists gain access to various geographical locations such as the Amazon rainforest in Brazil.

On a larger scale, some EU programmes are designed to integrate national research funding schemes. For example, the <u>BONUS project</u>, which gathers eight countries from the Baltic region, combines research related to the Baltic Sea system into a joint interdisciplinary programme that supports the area's sustainable development. Apart from profiting from the synergy effect, partnering-up also allows the scientists there to be better heard by policy-makers. The European Union is also leading initiatives which aim to combat challenges difficult to address effectively by individual countries, such as fighting microbial resistance.

The importance of the ERC in shaping international research collaboration was highlighted several times

during the workshop. To date, the ERC signed two bilateral agreements to boost scientific cooperation, with the US <u>National Science Foundation (NSF)</u> and with the <u>National Research Foundation of</u> <u>Korea (NRF)</u>. Thanks to this, ERC grantees can host scientists funded by the NSF or the NRF for several months to establish new international collaborations. One year after signing the agreement with South Korea, 34 Korean scientists were selected and are currently being hosted by ERC-funded research teams. Similar bilateral agreements, for instance with Argentina and South Africa, are on the way.

Complementarity in research funding emerged as an important topic in many talks. The flagship example were the initiatives, undertaken in several EU Member States, in which preselected ERC applicants who were not funded due to budgetary limitations, can receive financial backing on the national level.

Two days of inspirational discussions allowed participants to return to their home countries not only with Belgian chocolate, but also with new ideas on how to foster international research through creative funding strategies.

Read more about:

- agreement with the NSF
- agreement with the NRF









As Commissioner for Research, Science and Innovation Carlos Moedas took office two months ago, we put the research landscape in his home country in the limelight.

Portugal's public investment in research has been above the EU average in the last decade. In 2013 the government spent over 1% of the national budget on research and development, which is comparable to Denmark and Finland, known as EU innovation leaders.

Although the R&D intensity decreased in Portugal in recent years, there are reasons to believe that this trend will soon change. For instance, after several years of financial cuts, the main research funding agency in Portugal, <u>Fundação para a Ciência e a</u> <u>Tecnologia</u>, will see a 5.5% rise in its 2015 budget.

According to <u>statistics</u>, Portuguese researchers are particularly active in the field of biotechnology. Other

key areas are: agriculture, food and fishery, materials, environment and ICT.

Portuguese institutions host 34 ERC grant holders so far, 22 of whom have been awarded Starting Grants. This shows that Portugal is home to promising earlycareer researchers with the potential to become scientific leaders in their respective fields. This is in line with the vision of Commissioner Moedas, who, during the <u>6th European Innovation Summit</u>, called for nurturing "*the next generation of young, talented and dynamic scientists, researchers and innovators.*"

The Commissioner is the second Portuguese personality, after former member of the ERC Scientific Council Prof. Maria Teresa Lago, to be involved in the ERC. Additionally, around 34 Portuguese scientists serve as ERC external experts and evaluation panel members.



#### Interview with

### Ana Mafalda Dourado and Alexandra Veiga, the Portuguese National Contact Points (NCPs)



#### What is the general perception of the ERC in Portugal?

It depends on the audience. Institutions that have been able to attract ERC funding so far know what the ERC stands for; they are very much aware of the importance of ERC grants. Younger researchers are open towards the ERC, while established researchers often view the ERC with more reservation, which is reflected in the lower number of applications in Advanced Grants calls from Portugal.

There are some promising young researchers who know a lot about the ERC. They are aware of not yet having reached the right level to apply, but have made the decision to do it at the right time in the future.

Some researchers - with excellent potential and with a considerable knowledge of the ERC funding schemes - are still quite sceptical about their chances to win a grant and often ask themselves whether it is worth investing time and effort in preparing an application (this is the ERC NCPs' biggest challenge).

Finally, during the regular promotional activities we organise, a substantial number of researchers are learning about the ERC for the first time.

## How are Portuguese researchers performing in ERC calls?

Portugal's performance varies depending on scientific domain and ERC scheme.

Portugal has been more successful in winning Starting Grants, and also - more recently - Consolidator Grants, than in acquiring Advanced Grants, in which Portuguese researchers have been clearly underperforming. But as our Starting and Consolidator grantees are gaining more experience, we hope that Portugal will also become more competitive in winning Advanced Grants within a few years.

DA. Veiga

To date, over 50% of ERC grantees in Portugal work in the field of Life Sciences. Physical Sciences and Engineering come next; about 30% of the grants are awarded in this field. The remaining 20% of ERC-funded projects based in Portugal are in Social Sciences and Humanities.

## Are there any initiatives in Portugal supporting researchers willing to apply for ERC funding?

All the country's Horizon 2020 NCPs are coordinated by a dedicated body, the <u>Portuguese Framework Promotion</u> <u>Office</u> (GPPQ). Among other things, the GPPQ raises awareness about the ERC schemes and offers support to ERC candidates throughout the application process. If contacted at an early stage, the GPPQ can provide a trial interview for Starting and Consolidator Grant candidates who have been invited to the second stage of the ERC evaluation procedure. GPPQ also organises information sessions during which ERC grantees present their views and give advice to potential ERC candidates.

The Portuguese <u>National Science Foundation</u> (FCT) is currently offering funding to ERC Starting and Consolidator Grant applicants, whose projects were preselected, but who did not receive a grant due to ERC budget limitations. This is to help them improve their proposals to resubmit them in the following ERC call. The funding can cover, for example, salaries, scholarships for scientific staff, or costs of publications and direct research.

#### **ERC grants in Portugal**

> 34 ERC grantees are based in Portuguese host institutions, representing a total funding of around € 54 million

- > 22 researchers hold Starting Grants, 4 Consolidator Grants and 8 hold Advanced Grants
- > 18 projects are in Life Sciences, 10 in Physical Sciences & Engineering and 6 in Social Sciences & Humanities
- > 22 Portuguese ERC grantees are based outside Portugal



### Did you miss this?

### Grantees debate future of science in Berlin

On 9 November in Berlin, three ERC grantees presented their research at <u>the Falling Walls 2014 conference</u>, an event attended every year by high-level international scientists to discuss future breakthroughs. Prof. Anton Zeilinger opened the event with his views on quantum mechanics. Dr Suchitra Sebastian presented her research on the Holy Grail of superconductors. Prof. Svante Päabo explained the genetic differences between bonobos and chimpanzees and how it relates to human evolution.

Their talks are now available online.



#### ERC funds 328 young researchers

The ERC's seventh Starting Grant call – and the first under Horizon 2020 – awarded €485 million to 328 promising young researchers to help them fully develop their potential and become a new generation of research leaders. The funding will allow them to build their own scientific teams to carry out blue-sky research projects. For the first time, the success rates for male and female candidates were virtually equal this year. Around 33% of funded grantees are women. Over 3,200 candidates applied for ERC funding in this call.

Read ERC press release

#### In the spotlight in Asia

The <u>EURAXESS Links conference</u> kicked off in Singapore on 11 November and continued in Bangkok on 13 November, reaching hundreds of non-European scientists. It aimed to open up mobility between the EU and ASEAN by informing researchers of opportunities that exist in Europe and in European research-intensive industries established in ASEAN. Head of ERC Communication Unit Massimo Gaudina presented the ERC's schemes and led a workshop with other collegues from the European Commission. Euraxess events were also organised in China and Japan this year.



#### **Meet Poppy!**

Poppy is an open source robot that anybody can build; its body is 3D printed and its behaviour programmed by the user. It was created by ERC Starting grantee Dr Pierre-Yves Oudeyer and his team. In October, the Poppy platform was launched – allowing people to take part in building their own robots using online resources. Poppy can be used for vocational training purposes, to allow students to experiment and build 3D printed robots with various characteristics. "*It could foster a more interactive and inspiring learning environment*", explains Dr Oudeyer.

Read also ERC press release





### Future Calls

## **CALENDAR OF ERC CALLS**

#### Grants open to researchers from anywhere in the world

Call for proposals*	Publication date	Deadline	Budget	Funding
ERC 2015 Starting Grant	7 October 2014	3 February 2015	€430 million	Up to €2 million per grant
ERC 2015 Proof of Concept Grant**	7 November 2014	5 February 2015 28 May 2015 1 October 2015	€20 million	Up to €150 000 per grant
ERC 2015 Consolidator Grant	13 November 2014	12 March 2015	€585 million	Up to €2.75 million per grant
ERC 2015 Advanced Grant	10 February 2015	2 June 2015	€630 million	Up to €3.5 million per grant

\*Researchers who wish to apply to one of the ERC's calls can do so through the Participant Portal.

\*\*Calls open to ERC grantees only

#### Important:

Read the new rules for re-submission of proposals. For details on these rules, please see <u>ERC Work Programme 2014</u> (pp. 18-19).

Note that there are new rules regarding the reference date for Starting and Consolidator grant applicants' eligibility in the <u>ERC Work Programme 2015</u>, (pp. 15-17).

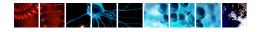
Stay tuned on the ERC website.

Candidates should apply with a host institution in an EU Member State or Horizon 2020 Associated country. (See further information on the <u>Participant Portal</u>.)

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It is with great sadness that we have learned of the death of Prof. Dimitrios Trichopoulos, a very valuable ERC panel member whose contribution to the panel related to "*Diagnostic tools, therapies and Public health*" was exemplary. He supported wholeheartedly the spirit and the work of the ERC. We will greatly miss his enthusiasm and knowledge, but will keep our fondest memories of him with us, as we continue to support some of the best scientists, a mission that we know he shared with us.





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ase managEditorial Board: Massimo Gaudina, Madeleine Drielsma, Magdalena Kufrej Noélie Auvergne, Samantha Christey, Maud Scelo Scientific Council members: Pavel Exner, Danny Dolev, Isabelle Vernos otechnics • WThanks to: ent • Computational e Ana Mafalda Dourado, Charlotte Kok, Simone Mayer, David Millingen Laura Ruiz Trullols, Edward Smith, Alexandra Veiga, Fabio Velardo For comments:

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