

ideas

Newsletter of the European Research Council



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Editorial



Dear reader,

As the European Commissioner for Research, Innovation and Science, I am proud to be responsible for a European endeavour as exciting as the European Research Council (ERC). In the ERC, Europe has succeeded in creating a truly investigator-driven research funding organisation, increasing competition amongst researchers at pan-European level. To date, over 2200 top scientists have been supported through ERC grants to break new ground at the frontiers of knowledge in a wide range of disciplines. The ERC has made it worthwhile for our best brains to stay in, or return to Europe. What's more, the ERC can play a key role in attracting talent of any nationality from further afield. The ERC is a real success story, and has radically improved the European research landscape in a very short time.

Research and innovation are at the very top of Europe's political and economic agenda, and both are critical to our economic recovery and to tackling the grand challenges we face, such as climate change, healthy ageing, food security, energy and sustainable growth. The ERC plays a crucial role here - the research it funds is already starting to bear fruit, with discoveries that make real differences to people's lives. High-risk/high-gain research of the type supported by the ERC often sparks innovations, which in turn will fuel the economy and contribute to making Europe's Innovation Union a reality.

The new programme for research and innovation, 'Horizon 2020' will run from 2014 to 2020 and is now under preparation. The challenges, but also the opportunities, are so great that we must combine forces at the European level, and for this we need a new, ambitious yet simplified funding programme that is fit for purpose.

To stay competitive, we need to strengthen our excellent research, which is reflected in the European Commission's proposal to increase the research budget to €80 Billion. The proposal includes a significant boost to the funding allocated to the ERC. I am the ERC's greatest supporter, and believe the ERC should continue on its successful path, keeping scientific excellence and bottom-up support at its core.

Finally, I would like to warmly welcome the new ERC Secretary General, Professor Donald Dingwell, who took up his new position in Brussels on 1st September.

I hope you will enjoy this edition of the *i*deas Newsletter.

Commissioner Máire Geoghegan-Quinn

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Meet...

Professor Donald B. Dingwell - the new ERC Secretary General

Overlooking the Brussels sky line from his office at the ERC headquarters, Prof. Donald B. Dingwell is quickly settling into his role as the new ERC Secretary General. Serving as the "ERC Scientific Council's man in Brussels" since 1st September, he works on a daily basis with the ERC Executive Agency, which is in charge of implementing the "Ideas" Programme. He essentially acts as the link between the Scientific Council, the Agency and the European Commission.



Originally from Canada, Prof. Dingwell is a renowned geoscientist. Since 1987, he pursues his groundbreaking research in Europe at Ludwig Maximilian University, Munich, Germany. His research involves experimental volcanology that is using model systems of explosive volcanoes under the controlled conditions of a laboratory to study directly the physical and chemical processes that cause the destructiveness of explosive volcanic eruptions.

Holding both Canadian and German nationality, Prof. Dingwell has strong links to both continents and will have a key role in the international outreach strategy, which is one of ERC's priorities. His multifaceted experience with the ERC will also be useful in his new capacity: he has been both an ERC peer review panel member and a holder of an Advanced Grant.

Prof. Dingwell's term of office runs until at the end of the 7th EU Framework Programme for Research in December 2013.

Two questions to Prof Dingwell:

How do you see your role as ERC Secretary General?

For now, I am in a pretty enviable position as I am in the learning phase. I get to know all aspects of the ERC, its functioning as well as the relations between the Council, the ERC Executive Agency and the European Commission. My role will be to build upon an ERC where these three elements testify to the principles of its founding, naming its bottom-up strategy and the criterion of excellence.

What are your hopes for the ERC's future?

I hope to see a future that is far greater than the ERC's brief existence. The ERC should be in the ear of every researcher in Europe and worldwide. It should be seen as a haven of freedom and an opportunity where researchers themselves set the tone. This combined with a world-class administration and talented staff from both the Agency and the Commission, will make the ERC a powerful instrument for change!





Going global

Nurturing transatlantic relations



"I didn't know about these ERC grants! And I will certainly apply next year, as I strongly feel European and I would like to come back to Europe for my career", says Alexandra, 32, one of the many European researchers attending the ERC presentation, held in June 2011 - at the occasion of the Polish EU Presidency - at the Embassy of Poland in Washington DC.

The event, attended by some 70 European researchers, was organised by Izabella Zandberg from Euraxess-

Links US. As a European Commission service, **Euraxess-Links** is a virtual network designed to keep European researchers working abroad informed of EU funding opportunities. It also offers them free assistance and information when they relocate to another country.

The ERC session was introduced by the Science Counsellor for Poland in the US,

Prof. Marek Konarzewsky. Massimo Gaudina, Head of the ERC Communication Unit and two scientific officers, Vaida Bankauskaite and Eleni Zika, presented the ERC's mission and opportunities for researchers abroad. Young researchers from several EU countries, working at the National Institute for Health (NIH) and in other US top research organisations attended the meeting. They showed a keen interest in the flexibility of the ERC funding schemes, the possibility to move from a host institution to another while keeping one's grant ("portability"), the high-gain/high risk element

of the programme and the real independence it provides to researchers.

To sum up, the amount and the duration of ERC grants, as well as the principle of scientific excellence are very attractive features for researchers based throughout the world to come back, or to move to Europe to pursue their research projects.

As world leading hotspot for top research, the US

is one of the key locations for ERC's outreach activities. In Washington, the ERC representatives also attended the BIO international convention, a global conference for biotechnology and met with numerous European and American researchers both at Georgetown University and at the national Academy of Sciences. In addition, another meeting with S&T Counsellors of some EU Embassies was

held at the Washington EU Delegation office to promote the ERC's visibility further.

This autumn, the ERC plans to participate in the Society for Neuroscience Annual Meeting 2011 to reinforce its presence on the East Coast. A special joint session on "international funding opportunities" is planned with representatives from the ERC and US, Canadian and German funding bodies. This conference attracts annually more than 20 000 experts in neurology to keep abreast of the latest news in this field.

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What's new

New ERC "Synergy Grant" scheme: Supporting small groups of excellent researchers



In recent years, small research groups of principal investigators and their teams have emerged as an increasingly productive link in the research chain. These groups often tackle interdisciplinary research problems, pooling together their expertise, knowledge and resources. Building on its two core funding schemes supporting individual researchers, the ERC is launching a new pilot initiative - the "Synergy Grant" - to fund small groups of excellent researchers to push forward the frontiers of knowledge.

The ERC aims to support proposals that demonstrate the complementarity and added-value of joint research leading to breakthroughs that would not necessarily be possible to achieve without the proposed group's configuration. Groups of between two to four researchers can apply for a maximum grant of \in 15 Mio for a period of up to six years. The total funding of the first pilot Synergy Grant call is \in 150 Mio, representing approximately 10% of the 2012 ERC budget for calls. No more than 10 to 15 Synergy Grants will be awarded in 2012, and only exceptional proposals are likely to be funded.

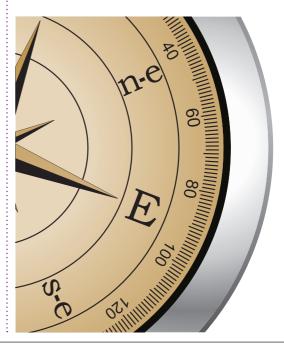
The first call will be published on **25 October** 2011 with a deadline for submission in January 2012.

To know more about ERC funding, click here

Heading Eastwards

ERC grants are not evenly distributed throughout Europe: call results have shown that there are less applicants and successful candidates in some of the newer EU Member States.

The ERC is keen to spread its funding to excellent researchers all over Europe, which is why it started an outreach campaign to widen participation in these countries. The ERC and its Scientific Council went to Bucharest last year and to Budapest in June 2011, under the Hungarian Presidency of the EU. To build upon these successes, the ERC will also participate in several events in Poland, now holding the Presidency of the EU, to raise awareness amongst scientists in the country (See page 8). Furthermore, the Scientific Council will hold one of its meetings in Riga, Latvia, this autumn. By ensuring that the best scientists are well informed throughout Europe, the ERC hopes to increase the level of participation in ERC competitions and ultimately to contribute to nurture the interest for sciences in these countries. Let's spread the word!





What's on

Taskforce seeks to secure success of the ERC



ERC President Prof. H. Nowotny and Director-General for Research and Innovation R.-J. Smits, July 2011

In the EU, the ERC is not only seen as "the new kid on the block", but is also the only one of its kind when it comes to its institutional set-up. The ERC's scientific strategy is in the hands of its independent Scientific Council, made up of 22 renowned scholars representing the European research community. The implementation of the strategy is entrusted with the ERC Executive Agency, which is administratively autonomous but still linked to the European Commission. The latter guarantees the ERC's independence and provides the funds via the 7th EU Framework Programme for Research. By now, the ERC has received wide international acclaim both from the research community and from decisionmakers. To safeguard its continued success, the ERC has recently undergone a close scrutiny.

In December 2010, the European Commission set up a Taskforce to look into the future of the ERC's governance. With the new negotiations of the future research framework **Horizon 2020** in sight, it was timely to identify the way forward for the four-year-old European research funding organisation. The Taskforce also built on an earlier major review conducted by an external panel of experts that took stock of the ERC's structure and mechanisms after its first years of operations and specifically called for a follow-up review two years on.

Concluding its work in July this year, the Taskforce recommended that the ERC's implementation body should remain an Executive Agency as the best way to deliver a major contribution to the forthcoming 'Horizon 2020' programme.

Another key recommendation is that the President of the ERC - who also chairs the governing body, the Scientific Council - should have a quasi-full time role and be based in Brussels. Taking effect from 2014, this new role would make the post of ERC Secretary General - the Scientific Council's permanent representative in Brussels - redundant. Until then, the three top functions - the ERC Secretary General, the ERC President and the ERC Executive Agency Director - will continue to co-exist.

The Taskforce was chaired by the Commission's Research and Innovation Director-General R.J. Smits and included other distinguished personalities such as ERC President Prof. H. Nowotny, former Latvian President Prof. V. Vīķe-Freiberga former ERC Secretary General Prof. E.L. Winnacker, as well as a number of key Commission officials.

To read more about the Task Force's report, click here

Interview with...

Dr. Natalia Letki, ERC Starting grantee



Natalia Letki, from the field of Social Sciences and Humanities, is the first Polish female researcher to benefit from an ERC Starting Grant. She was meant to become a professional cello player when she discovered her passion for sociology at Warsaw University and started a new adventure. At crossroads

between politics and sociology, she held a doctoral scholarship at Oxford (UK) and received a Post Doctoral Prize Research Fellowship at Nuffield College before returning to Poland in 2005. In 2009, she was awarded around € 1.7 Mio from an ERC grant for carrying out a research project on the perceptions of public goods, such as health, education, security or clean air, in post-communist countries. She explains below the ins and outs of her project and the main reasons for promoting researchers' mobility across Europe.

What is your ERC-research project about?

The title of my project sums up very well its content: "Public Goods through Private Eyes". In other words, it examines the attitudes that citizens in post-communist countries hold towards public goods and for instance "green behaviour". It also explores a range of factors determining their willingness to contribute to producing such goods or to recycling household waste. I systematically analyse social mechanisms at stake to maintain and encourage cooperation between citizens, as well as between the State and citizens as regards public goods production.

From a scientific point of view, what are the main differences between Central and Eastern Europe countries and other EU countries?

One of the main differences is that citizens from postcommunist countries are less aware of the crucial link that exists between their contributions towards public goods and returns they get from the State. Under communism, although people did not pay taxes, they enjoyed extensive welfare provisions. The other main difference compared to Western countries is the very strong legacy of hostility towards the State. Both issues have negative implications on how public goods are produced.

What concrete applications do you expect from your research for policy-makers and academics?

In my opinion, we will be able to draw a series of recommendations for policy-makers about ways to engage people to contribute further to society. This is of particular importance in times of financial crisis when the legitimacy of states is questioned because of their poor economic performance. I hope to be able to draw up factors to maintain citizens' confidence in the State and their cooperation with it. Thanks to a full-scale national survey, I also expect to come up with new methodologies and techniques that could be used by other scholars in future research.

How did the ERC grant help you to set up your research project in Poland?

The ERC grant was essential for me. Not only did it help to establish myself as an independent researcher in Poland at an early stage of my career, but it was also crucial in setting up my research team. Four junior researchers and a network of collaborators worldwide now help me to conduct this project and I can say that without an ERC grant, I would not have been able to work on such a scale, especially not in the field of Social Sciences!

What is your best advice to increase the number of successful candidates and female applicants in Poland?

I firmly believe that we must promote international work experience, especially at an early stage of one's development: it is an absolute necessity if you wish to make a serious academic career. I think the current Polish system should be more connected with the outside world. My personal experience in the UK was decisive in getting access to new books, journals and other resources, but more importantly, it was essential for grasping inspiration from top lecturers and researchers from all over the world. This is an invaluable experience. However, I don't make any difference between male and female researchers at a scientific level. What counts is the confidence and enthusiasm you have about what you're doing!



Focus on...

Poland





Under the current Polish Presidency of the European Union, the ERC has made sure to increase its presence in Poland. Since the last two grant calls, the number of applications from Polish researchers has steadily increased (roughly doubling in both the Starting and Advanced Grant competitions).

In this context and with the support of the ERC, the Polish National Contact Point is coordinating specific seminars in various research institutions to increase participation and awareness of the ERC amongst researchers in Poland. The first meeting takes place in Poznan on 18 October 2011 and is part of a major, oneweek event on the 7th EU Framework Programme. The second event will gather researchers and academics from all parts of Europe in Wroclaw, with a final conference in Krakow on 20 October.

Furthermore, the Polish Presidency was very active in organising the event "Science, Technology, Higher *education and Society in the conceptual age*" in Krakow in July 2011, where Prof. Pavel Exner, one of the ERC Vice-Presidents, represented the ERC.

As new ERC Secretary-General, Prof. Donald B. Dingwell participates *in the European Intersectoral Summit on Research and Innovation*, organised in Krakow on 26 to 27 September by 'Atomium Culture' - a platform bringing together some of the most authoritative universities, newspapers and businesses in Europe - in cooperation with the Polish EU Presidency, the European Commission and the European Parliament.

Earlier this year, Pablo Amor, Director ad interim of the ERC Executive Agency, met with *Polish Under-Secretary of State*, Prof. Maciej Banach, to discuss the Presidency's main priorities, as well as the role of the ERC and ways to build on its success.

Polish key personality in the ERC

Prof. Tomasz Dietl is a member of the ERC Scientific Council, which represents the European research community. In Poland, he is the Head of the Laboratory for Cryogenic and Spintronic Research at the Institute of Physics (Polish Academy of Sciences) and Professor at the Institute of Theoretical Physics (University of Warsaw). From 2007 to 2010, he served as a panel member in the evaluation process for ERC Starting Grants and was also awarded an Advanced Grant in 2008.

More information and pictures on the ERC website

ERC Grants in Poland after seven completed calls

- > Ten projects have been selected for funding for researchers based in Poland, representing a total of around € 16 million (*).
- > Seven selected projects are in the Physical Sciences & Engineering domain, two are in Life Sciences and one in Social Science & Humanities.
- > All grantees are based in host institutions in Warsaw.
- > Eight selected projects are Starting Grants.
- > The first Polish woman scientist to be awarded an ERC grant was selected in 2009 (ERC Starting Grant call).

The complete list of signed projects in Poland is available on CORDIS.

(*) Six grants were also awarded to Polish researchers based in other countries (Germany, Italy, Israel, Spain, Switzerland and the United Kingdom).

Interview with Dr Wiesław Studencki, Polish National Contact Point



From your point of view, why should Polish researchers apply for ERC Grants?

Not only are the ERC grants the most prestigious European grants, but they also give researchers a great deal of freedom in conducting their research project, in hiring new

members to their research team and in choosing the most relevant institution. Also important is the substantial budget they are allocated, which allows them to carry out research at a very high level. On top of that, ERC grants give top researchers the opportunity to stay in their home institution or to move to another EU country. It's a very flexible scheme.

How do the ERC funding schemes benefit Polish researchers?

So far, Polish researchers have had limited interest in ERC grants. However, I hope that from the only eight grants we received after six completed calls, the research results will lead to scientific successes. Although we have not yet reached the critical mass needed to assess the impact of ERC grants on the Polish research system, they have indirectly influenced the newly established Polish National

Science Centre, the country's funding agency for basic research, which has adopted many concepts tested earlier by the ERC.

How could the number of successful applicants from Poland be raised?

The only way is to convince and encourage the best researchers to apply. We therefore need to focus on two aspects: the very low number of successful candidates and the unsatisfactory number of highlevel applicants. In my opinion, the supportive role of institutions (which is missing until now) is a crucial factor for success. Directors, rectors and deans who know the leading and most promising scientists are best placed to encourage them to apply and to ensure the best working conditions.

As the National Contact Point, how do you contribute to that objective?

The NCP does not act alone, as there is a network of ten Regional Contact Points. The information about ERC calls is widely spread among scientists. The Ministry of Science and Higher Education also regularly sends information to university rectors and institute directors. We can say that this helps a lot to reach a broader audience. Researchers have every possible help from Contact Points through infodays and meetings, practical workshops, personal "tête-à-tête" meetings, and support on financial, legal and administrative aspects.



Research in the spotlight

World-renowned ERC Grantee won the prize for Distinguished Women in Chemistry



Prof. Luisa De Cola, from the University of Muenster in Germany, received in August, in Puerto Rico, the Prize for Distinguished Women in Chemistry and Chemical Engineering awarded by the International Union of Pure and Applied Chemistry. This prize acknowledges

and promotes the work of about 20 women chemists and chemical engineers worldwide. This year, it also marks the International Year of Chemistry 2011 and celebrates the 100th anniversary of the Nobel Prize in Chemistry to Marie Curie.

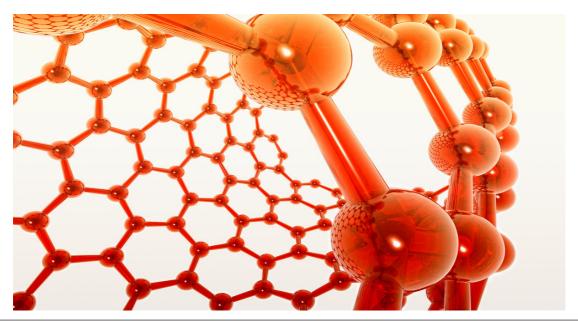
Prof. De Cola has an impressive career and in 2005, at the age of 38, she became a full professor in Physics and Chemistry at the University of Amsterdam. She is often recognized by peer scientists as a leader in an interdisciplinary field of research, which not only comprises luminescent materials, but also recently nanomaterials for medical imaging and diagnostics. In 2009, she won an ERC Advanced Grant for her

project "MAGIC, Nano-Materials for Cell Growth, Imaging and Communication".

With this project, she stretches even further the boundaries of chemistry and the crossing of scientific disciplines, moving chemistry into the realm of biology and medicine. Her research aims at using porous materials of nano dimension, filled with different molecules, and study how they interact with biological systems. In particular, intracellular imaging and its combination with therapy are some of the challenges of her project. Ultimately, these techniques could be used to understand cell-to-cell communication and help to increase our knowledge on vital biological processes. Luisa De Cola's research is at the forefront of a new field called nanomedicine. If successful, it could stir up medical applications, their many impacts on our society and on the way we perceive medicine.

By Antonella Di Trapani

To read more about the International Year of Chemistry 2011, click here



Highlights - Did you miss this?

ERC Grantee's findings lead story in Science

ERC grant holder Dr. Marc Chaussidon from the Centre de Recherches Pétrographiques et Géochimiques in France, made the lead story of Science's edition of 24 June. Co-written with Prof. Bernard Marty, who is a recent ERC grantee, the publication presents analyses they made on samples of the sun and shows that nitrogen molecules originating from the sun are very different from the nitrogen found on Earth, Mars and on meteorites. The results shed light on the composition of the sun's photosphere, which may be one of the challenges of future studies in cosmo-chemistry.

To find out more, click here (June 2011)

Interested in applying to the fifth call for ERC Starting Grants?

With around €730 million funding, the fifth call for "ERC Starting Grants" is now open. It is targeted at early-career top researchers of any nationality, in any field of research and working - or moving to work - in Europe. It will help emerging talent to pursue innovative ideas at the frontiers of knowledge. The budget for this call increased by more than 10% from last year's and will fund 500 to 600 talented researchers.

To find out more, click here (July 2011)









€670 million to fund the most promising top talent

The ERC announced that over €670 million will support some 480 early-career researchers to carry out their pioneering research in any domain throughout Europe. In this fourth 'ERC Starting Grant' competition, the number of applications increased by 42% compared to last year. 38 different nationalities are represented and 17 candidates will move from the US to conduct their projects in Europe.

To find out more, click here (September 2011)

Visit the new ERC website

A more modern, dynamic and user-friendly ERC website has just been launched. It offers new functionalities and allows web users to make tailored searches. It also gives more visibility to striking ERC projects. Documents, FAQ's and specific information on funding opportunities are easier to find than ever! Also, a special section for non-EU researchers has been developed. Don't miss the new multimedia library and keep updated by clicking on: http://erc.europa.eu/keep-updated-erc

