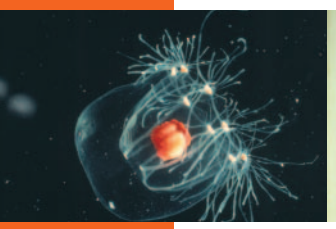
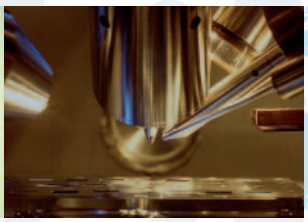
ERC: activities & achievements in 2008
Annual Report



2008

Prepared under the authority
of the ERC Scientific Council

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EUROPEAN COMMISSION
Directorate-General for Research
Directorate S – Relations with the ERC Executive Agency
Unit S.1: Co-ordination with the ERC Executive Agency
E-mail: RTD-ERC@ec.europa.eu
Contact: William Cannell
European Commission
Tel. (32-2) 29-60952
Fax (32-2) 29-93173
E-mail: william.cannell@ec.europa.eu
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ERC: activities & achievements in 2008
Annual Report

Prepared under the authority of the ERC Scientific Council

Directorate-General for Research
2009 Directorate S – Relations with the ERC Executive Agency EUR 23601

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Commissioner's introduction

This year saw the ERC take another crucial step on its pioneering journey, with the receipt of the first funds from the new body by researchers across Europe. These researchers, chosen on the basis of scientific excellence alone, now have the job of demonstrating the real value of the ERC. I have every confidence that they will: by undertaking excellent research, moving forward the frontiers of knowledge, leading the way and proving that European science can match the very best in the world.

It is also extremely encouraging that, in addition to the enthusiastic reaction of the scientific community, several national research-funding organisations have developed complementary measures to the ERC's grant schemes. These are the first signs of the wider impact that the ERC is expected to have on the European research landscape. I believe that over the years to come we will see just how profound the direct and indirect effects of the ERC will be.

After the tremendous achievement of getting the ERC up and running, so soon from scratch in 2007, the pace of work further accelerated in 2008. Successful efforts were made to build up the ERC Executive Agency which will be responsible for all aspects of administrative implementation and programme execution.

Entering its third year, the ERC is therefore in robust health and is already starting to demonstrate its great potential impact. For this, I would like to warmly thank the ERC Scientific Council, in particular its President, Fotis Kafatos, and Vice-Chairs, Daniel Estève and Helga Nowotny, for their enthusiastic work and their exceptional commitment. But I would also like to thank the Commission's services, in particular the ERC Dedicated Implementation Structure provided by the Research Directorate-General, its leadership and all of its staff, for their unseen work and their exceptional motivation in 2008.

Following the practice established last year on the initiative of the Scientific Council with the full support of the Commission's services, this report showcases the achievements of the ERC in 2008. It will be disseminated widely to both the scientific community and other key stakeholders with the aim of building awareness and increasing the transparency of the ERC's strategy and operations. The Commission has also prepared an Annual Report on the ERC's operations and achievement of its objectives in 2008.

Janez Potočnik
European Commissioner for Science and Research

Personal message from the ERC President

The ERC was created in recognition that Europe can only compete through investment in the knowledge triangle of research, education and innovation. Investment in excellent people and research is an imperative, not an option, particularly when the economic situation is unfavourable. Indeed, at such times in the past, individuals and organisations have shown themselves more willing than before to adopt and implement a wide range of new technologies and practices.

The ERC is already showing that it can make a major contribution to Europe's efforts by funding the very best pioneering and interdisciplinary frontier research. The ERC has rapidly gained worldwide recognition as a world-class research-funding agency. But the Scientific Council is fully aware of our responsibility to make the ERC even more successful, as it continuously strives to enhance its achievements.

This report, prepared again this year by the ERC Scientific Council, sets out the ERC's activities and achievements in 2008.

2008 has been a year for reaching important milestones but also of hard work. The first funding started to flow to the best young researchers in Europe and the first competition for established research leaders was concluded. But building on the special efforts made in 2007, the other major focus this year has been to move towards establishing the ERC on a long-term, sustainable basis. It has not always been plain sailing, and many practical difficulties have had to be overcome. But in all this, Commissioner Potočnik, Director-General of DG Research, Silva-Rodriguez and the team in the Dedicated Implementation Structure have given us strong cooperation, support and autonomy. This year, the Commission, with the ERC's input, has also set out the basis for a landmark independent review in 2009 which will examine whether the ERC's current structures and mechanisms are appropriate and effective, and how they may be improved further.

For its part, the Scientific Council has sought to keep the ERC's strategy simple, flexible and focussed so that the ERC can best achieve its core mission. That is, to promote scientific excellence, irrespective of age, nationality or discipline and to recruit, repatriate and retain the most promising young scientists and the best established research leaders. Ultimately, the ERC will be judged on the contributions which these dedicated men and women will make to Europe and the world through their groundbreaking research. But we cannot achieve our goals alone. The continued strong support of the scientific research community, the national councils, academies and funding agencies and the European institutions will be as important as ever in the coming years.

Professor Fotis C. Kafatos, FMRS
ERC President and Chairman of its Scientific Council

Katerina Aifantis (Greek) • At age 19, Katerina Aifantis graduated with a Bachelor of Science in Engineering from the Michigan Technological University in the US, and at age 21, became the youngest person ever to receive a PhD in the Netherlands. Three years later, at age 24, Katerina was the youngest recipient in the ERC funding round to receive a Starting Grant. With it, she will continue her father's scientific legacy on gradient theories and material instabilities at Aristotle University of Thessaloniki, Greece.

ERC Starting Grant Call 2007

- Research domain: Physical Sciences and Engineering
- Host Institution: Aristotelio Panespistimio Thessalonikis (Greece)
- Project title: Probing the micro-nano transition: theoretical and experimental foundations, simulations and applications (MINATRAN)

Nanotechnology spans applications ranging from electronics and aerospace to cancer detection and drug delivery. Related nanostructured materials and nano objects used for these purposes possess unique and unusual properties at the crossover to the nanoscale. Based on fundamental theory, experiment and simulations, the objective of this ERC project is to develop a robust multifunctional framework or probe for capturing the evolution of deformation and failure at the micro-nano transition regime.

Juleen Rae Zierath (American) • In 2001, Juleen Rae Zierath was both appointed Professor in Clinical Integrative Physiology at Karolinska Institutet in Sweden and awarded the Prestigious Minkowski Prize from the European Association for the Study of Diabetes. She is currently the head of the Section of Integrative Physiology, Department of Molecular Medicine at Karolinska Institutet, and holds a joint position in the Department of Physiology and Pharmacology. She is a member of the Swedish Research Council Board for Medicine and has published over 150 original research papers and review articles.

ERC Advanced Grant Call 2008

- Research domain: Life Sciences
- Host Institution: Karolinska Institutet (Sweden)
- Project title: Discovery of type 2 diabetes targets (ICEBERG)

The incidence of type 2 (non-insulin-dependent) diabetes mellitus (T2DM) is growing at an astronomical rate. Millions of people are diagnosed with this profound metabolic disorder every year. T2DM is manifested by progressive insulin resistance in tissues, such as skeletal muscle, adipose tissue, and liver. Current therapeutic agents to treat T2DM are insufficient, and newer approaches are desperately needed. This ERC project will focus on the identification and biological validation of metabolic pathways and key regulatory genes that cause insulin resistance in T2DM.

1. Bringing great ideas to life: year in review

Supporting top research leaders in Europe:

- Investigator-driven frontier research in all fields
- Scientific excellence as the sole selection criterion
- Major grants for the best researchers and ideas

1.1. Mission

The European Research Council (ERC) marks a new approach to investing in frontier research in Europe. Funded through the European Community's Seventh Framework Programme (FP7) as the implementation of the 'Ideas' Specific Programme, the ERC aims to enhance the dynamism, creativity and excellence of European research at the frontier of knowledge.

Projects are funded on the basis of proposals presented by individual researchers on subjects of their choice including interdisciplinary and high-risk projects. There are no thematic priorities. Proposals are evaluated on the sole criterion of excellence as judged by international peer review. There are no restrictions on the nationality of the principal investigators to be funded by the ERC, but they must carry out their proposed work primarily within the European Union or associated countries.

To best carry out this mission, the ERC uses a unique structure consisting of an independent Scientific Council made up of representatives of the European scientific community at the highest level, acting in their personal capacity, independently of political or other interests, and supported by a lean and cost-effective Dedicated Implementation Structure (DIS). The Scientific Council has the responsibility to establish the ERC's overall scientific strategy, the work programme and from a scientific perspective, its positions on implementation and management of calls for proposals and evaluation criteria, peer review processes and proposal evaluation.

1.2. Budget

The 'Ideas' Specific programme budget implemented by the ERC is EUR 7.5 billion to be granted over a period of seven years. It represents around 15% of the entire FP7 budget (see Figure 1).

Figure 1

ERC Grant schemes: Annual Budget Evolution 2007-2013

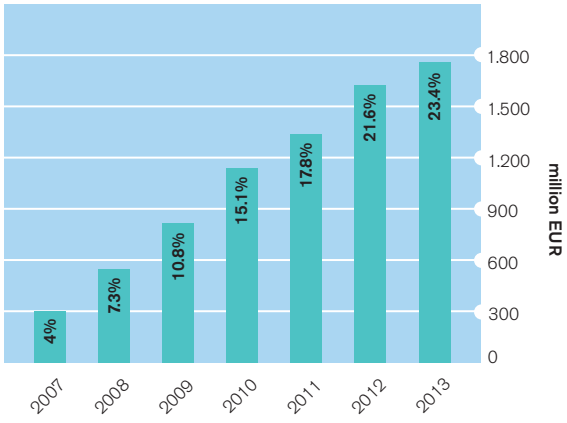


Figure 2

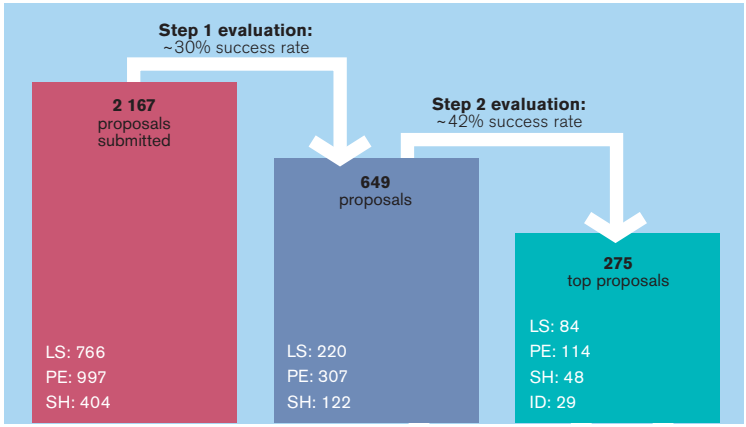
ERC Advanced Grants: evaluation process

LS: Life Sciences

PE: Physical Sciences and Engineering

SH: Social Sciences and Humanities

ID: Interdisciplinary



1.3. Main Achievements in 2008

Supporting top research leaders in Europe

After carrying to completion the highly popular first funding competition for Starting Grants in 2007, the ERC was able to conclude the first Advanced Grant competition for already established research leaders in 2008. With an increasing budget, from now on the ERC will be able to launch calls for both of these core schemes each year (see Figure 2).

An evolving organisation

There is a strong commitment from all concerned towards the success of the ERC by the Commission, the Scientific Council and the wider research community. In 2008, substantial progress was made towards achieving an administratively autonomous ERC Executive Agency to manage the ERC's grants and to support the Scientific Council (see Figure 3).

Foundations in place for review

In 2009, a landmark independent review will examine whether and to what extent the ERC's structures and mechanisms are appropriate and effective. The Commission, with the ERC's input, published a Communication (1) in 2008 setting out the basis for this review, which is expected to be instrumental in establishing a stable and sustainable structure for the ERC.

A growing reputation

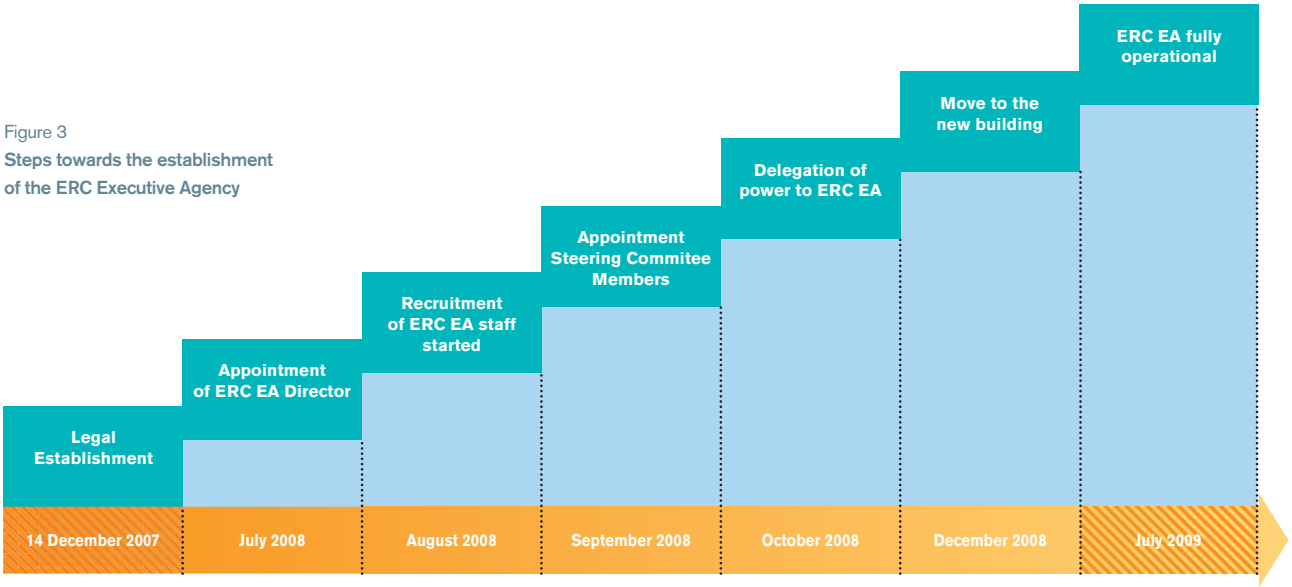
The ERC has rapidly gained European and worldwide recognition as a world-class research-funder. The ERC has strived to gain the necessary recognition and reputation, in order to attract the most innovative scientists in the world to its competitions. ERC grantees have been very popular with the media. From print to audiovisual forms, the media has published stories on ERC grantees, portraying their careers, describing their fascination for research and highlighting the significance of ERC funding in their research ambitions.

Wider reach, wider impact

ERC funding is already having an impact on the European research landscape beyond the specific projects being supported.

Several participating countries have launched national initiatives offering the possibility for financial support to finalists of the first ERC Starting Grant competition whose proposals could not be funded by the ERC due to budgetary limits.

Figure 3
Steps towards the establishment of the ERC Executive Agency



(1) *Communication from the Commission to the Council and the European Parliament on the Methodology and Terms of Reference to be used for the Review to be carried out by independent experts concerning the European Research Council Structures and Mechanisms*, COM(2008) 526.

Kazuya Koyama (Japanese) • Kazuya Koyama received his PhD in 2002 from Kyoto University in Japan. In 2006, he was awarded a Research Councils UK academic fellowship and later became a permanent member of staff at the Institute of Cosmology and Gravitation in the UK. He has made significant contributions to the understanding of inhomogeneous perturbations in the Universe and has developed cosmological tests of the new ideas in theoretical physics, such as brane world models.

ERC Starting Grant Call 2007

- Research domain: Physical Sciences and Engineering
- Host Institution: University of Portsmouth Higher Education Corporation (United Kingdom)
- Project title: Modified gravity as an alternative to dark energy (MGATDE)

The largest problem in the field of cosmology is explaining the recently observed accelerated expansion of the Universe. Within the framework of general relativity (GR), the acceleration originates from 'dark energy'. Alternatively, the late-time acceleration of the Universe may be attributed to a large-distance modification to GR. The main objective of this ERC project is to construct consistent models for modified gravity based on new ideas from particle physics. Part of the research will also aim to develop efficient ways of combining observational data sets to distinguish modified gravity models from dark energy models based on GR.

Atac Imamoglu (Turkish) • Atac Imamoglu received his PhD in 1991 from Stanford University in the US. After postdoctoral stays at research centres in Japan and the US, he joined the University of California, Santa Barbara, US, and was promoted to full professorship in 1999. Since 2002, Atac has been Professor of Quantum Electronics at Eidgenössische Technische Hochschule Zürich in Switzerland, where he heads the research group on Quantum Photonics. He has received numerous awards and honours, most recently the IEEE Quantum Electronics Award (2009).

ERC Advanced Grant Call 2008

- Research domain: Physical Sciences and Engineering
- Host Institution: Swiss Federal Institute of Technology (Switzerland)
- Project title: Quantum optics using nanostructures: from many-body physics to quantum information processing (QON)

Spins in nanostructures have emerged as a new paradigm for studying quantum optical phenomena in the solid-state. Research in this field has focused on implementing coherent manipulation using confined spins. It has been realised, however, that the principal decoherence mechanisms for confined spins (stemming from interactions with nuclear or electron spin reservoirs) are intimately linked to fascinating many-body condensed-matter physics. In this ERC project quantum optical techniques will be used to investigate physics of nanostructures in two opposite regimes, where reservoir couplings are either suppressed to facilitate coherent control or enhanced to promote many-body effects.

2. Supporting top research leaders to work in Europe: two core grant schemes

ERC Starting Grants supporting up-and-coming independent research leaders of any nationality with:

- 2 to 10 years after PhD award [2]
- An excellent track record
- A ground-breaking research proposal
- A host organisation located in Europe
- Promotion of early scientific independence of promising talents
- Up to EUR 2 million per grant for up to five years

ERC Advanced Grants supporting outstanding advanced researchers of any nationality with:

- An exceptional scientific leadership profile
- An excellent scientific track record
- A ground-breaking research proposal
- A primary host organisation located in Europe
- Up to EUR 3.5 million per grant for up to five years

[2] The length of time since award of PhD will be between 2 and 10 years for Starting Grant calls to be announced in 2009.

2.1. Funding for established and future research leaders

The ERC has developed two core grants: the ERC Starting Independent Researcher Grant ('Starting Grants') and the ERC Advanced Investigator Grant ('Advanced Grants').

The ERC Starting Grants address the gap in funding opportunities for researchers in the early stages of their careers. Through this scheme, researchers are supported in establishing or consolidating their own team with a view to a transition from working under a supervisor to becoming independent researchers. Advanced Grants are intended to support innovative, ambitious research projects by investigators who have already established themselves as exceptional independent research leaders.

Both types of grants operate without pre-defined thematic priorities and without any nationality restrictions for the principal investigator or the members of his/her team. The only restriction is that the research must be performed in the EU or one of the FP7 Associated countries.

The first calls for Starting and Advanced Grants were concluded in 2007 (StG 2007) and 2008 (AdG 2008) respectively. In 2008, the second calls for the ERC Starting (StG 2009, July) and Advanced Grants (AdG 2009, November) were published. In 2008, for the first time, the ERC was therefore handling proposals for both types of grants, at different stages in the researchers' life cycle.

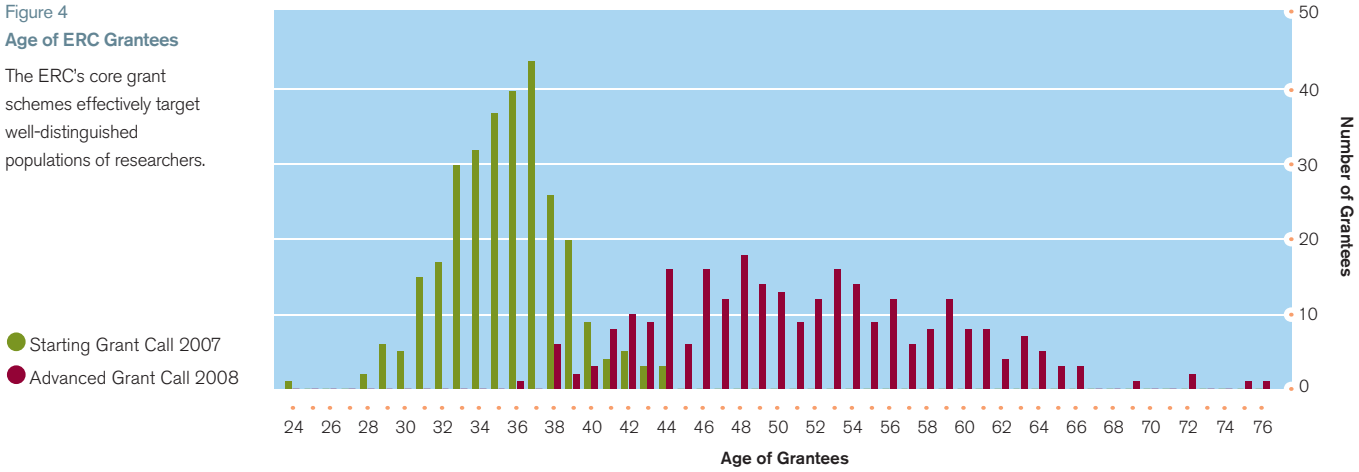
Comparing the results of the first two calls, it can be observed that the overlap in age distribution (see Figure 4) and years after PhD for the two grant schemes is very low. This shows that the schemes effectively target well-distinguished populations of researchers.

2.2. In search of excellence: the peer-review evaluation system

The ERC's peer-review evaluation process must command the confidence of the research community and is central to the achievement of the ERC's objectives.

The ERC Scientific Council adopted a structure of high-level international peer-review panels, covering the entire range of research disciplines and organised in a framework of three main research domains: Physical and Engineering Sciences (PE), Life Sciences (LS), and Social Sciences and Humanities (SH). Panel

Figure 4
Age of ERC Grantees
The ERC's core grant schemes effectively target well-distinguished populations of researchers.



members selected by the Scientific Council include scientists, engineers and scholars of the highest international reputation, from both within the EU and beyond.

Based on the focus of the ERC on knowledge without borders, and the experience of the first ERC Starting Grant call, an interdisciplinary domain was defined for cross-panel and cross-domain proposals. These proposals are 'mainstreamed' by initial assignment to the most relevant panel within the three main research domains. Based on the average funding of each main domain in the world, each call's budget is pre-allocated to these domains in the following proportions: 39% for Physical Sciences, 34% for Life Sciences, 14% for Social Sciences and Humanities and 13% for interdisciplinary research (see Figure 5).

The peer review in the three domains is carried out by a total of 25 panels led by Panel Chairs whose scientific status gives credibility to the selection process. The configuration of the evaluation panels was finalised by the Scientific Council during the first semester of 2008, taking account of the experience from the first Starting Grant call. For the Advanced Grant, two sets of panels have been put in place, operating in alternate years. This moderates the workload on individual reviewers and means that they are not excluded from applying to the ERC on alternate years when they are not involved in panels.

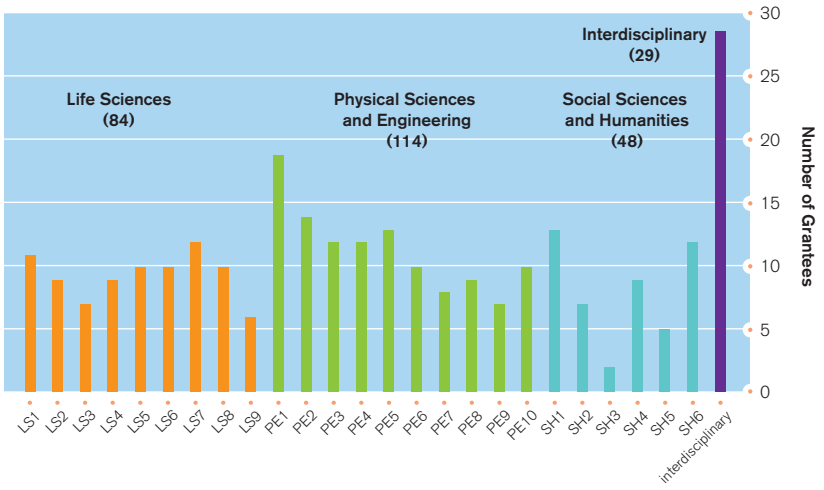
The ERC is a learning organisation. Thanks to the analysis of reports from the evaluation panels, the Scientific Council was able to address a number of issues related either to the schemes or the evaluation procedures. The ERC looks forward to making continuous improvements in areas such as IT tools, proposal forms, guidance for applicants and logistical support for experts.

2.3. Starting Grant 2007

The process for funding the proposals selected following the 2007 call was improved in 2008. This was achieved with the help of additional staff recruited during the year as well as the simplification and streamlining of procedures required to process a file. Invitations to start grant preparation were sent immediately after results were communicated to applicants. The granting process was explained in an accessible way in documentation provided with invitation letters and full use was made of electronic communications.

Time-to-contract for the 'Ideas' Specific Programme implemented by the ERC is now one of the fastest in the whole of the FP7 according to internal Commission

Figure 5
Advanced Grant Call 2008
Allocation of grants by panel



figures ([3]). Institutions hosting ERC grant holders are being encouraged to similarly adopt efficient methods to make the allocated funds available without delays.

The granting process of the first ERC Starting Grants was concluded during the first half of 2008, an experience that proved valuable for granting the first ERC Advanced Grants at the end of year. The Scientific Council followed the process closely.

Of the submitted proposals, 299 were eventually chosen for funding. The original budget of EUR 292.2 million grew to EUR 338 million thanks to contributions from the associated countries which participate in FP7. This increase in budget allowed the ERC to fund more grants than originally anticipated (see Figure 6).

2.4. Advanced Grant 2008

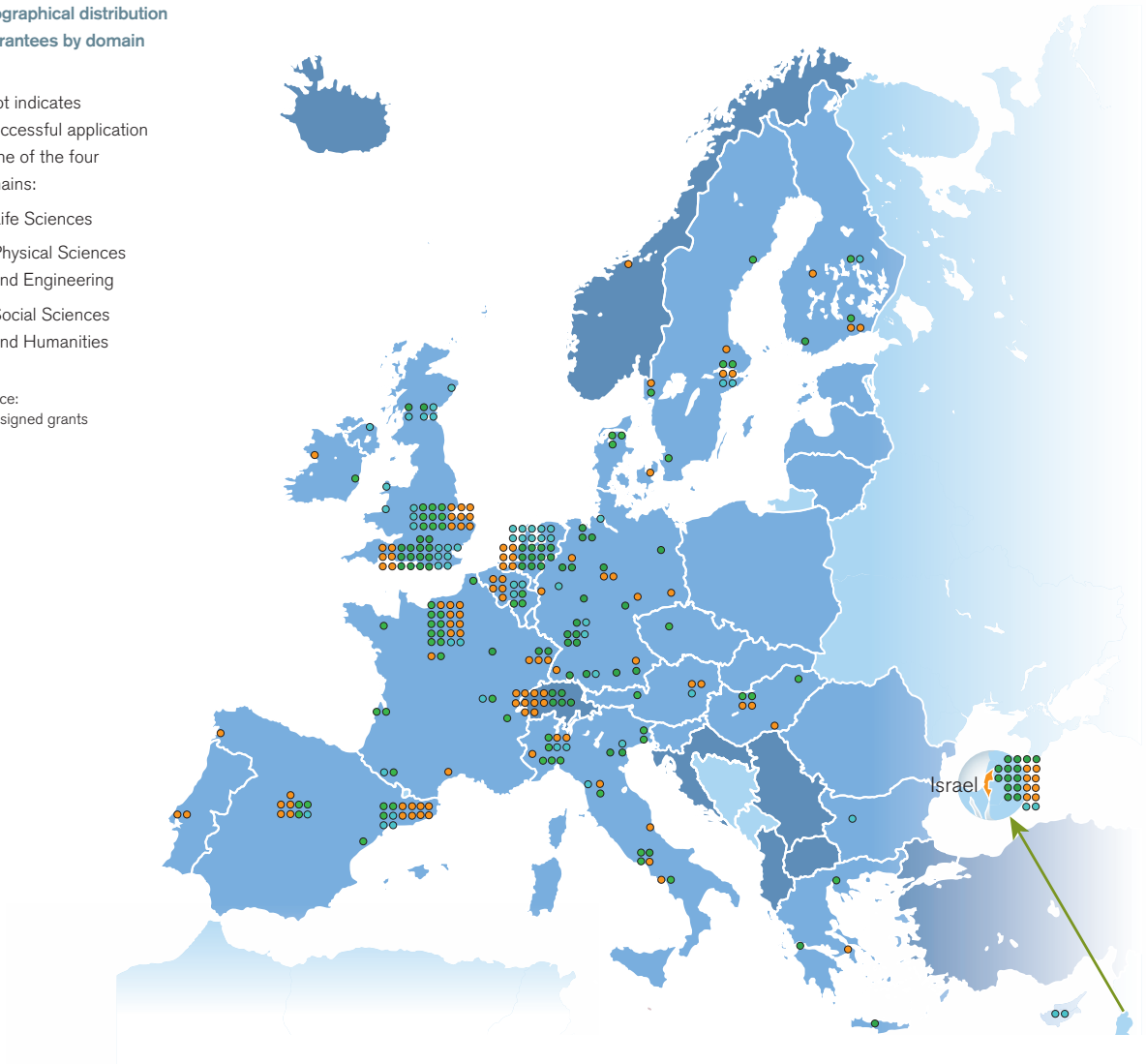
The first call for Advanced Grants was made in November 2007. The call was backed with a global indicative budget of EUR 517 million. Additional improvements were introduced, increasing the efficiency of the granting process. A single electronic submission was required. Lessons learnt from previous experience with Starting Grants were put into

Figure 6
Starting Grants 2007
Geographical distribution of grantees by domain

A dot indicates a successful application in one of the four domains:

- Life Sciences
- Physical Sciences and Engineering
- Social Sciences and Humanities

Source:
299 signed grants



([3]) Average time-to-contract is currently 295 days against an average of 326 days for all FP7 funding schemes. Out of 22 priority areas under FP7, only four, collaborative ICT projects, Marie Curie and certain support actions have a faster average time-to-contract than the Ideas programme (source: FP7 DataWarehouse).

practice and the median time to contract has been reduced by a further 30 days.

Promotion for the call and information was provided to applicants through the ERC website, the ERC news alert and the network of National Contact Points (NCPs) based in all the EU Member States and the FP7 Associated States. Information was also provided through the FP7 and ERC helpdesk.

A total of 2 167 proposals were submitted (997 in the Physical Sciences, 766 in the Life Sciences and 404 in the Social Sciences and Humanities). Of these, 275 were selected: 114 in the Physical Sciences, 84 in the Life Sciences, 48 in the Social Sciences and Humanities, and 29 were considered under the new interdisciplinary category[4] (see Figure 7) giving an overall success rate of around 13%.

2.5. Strengthening the European Research Area (ERA)

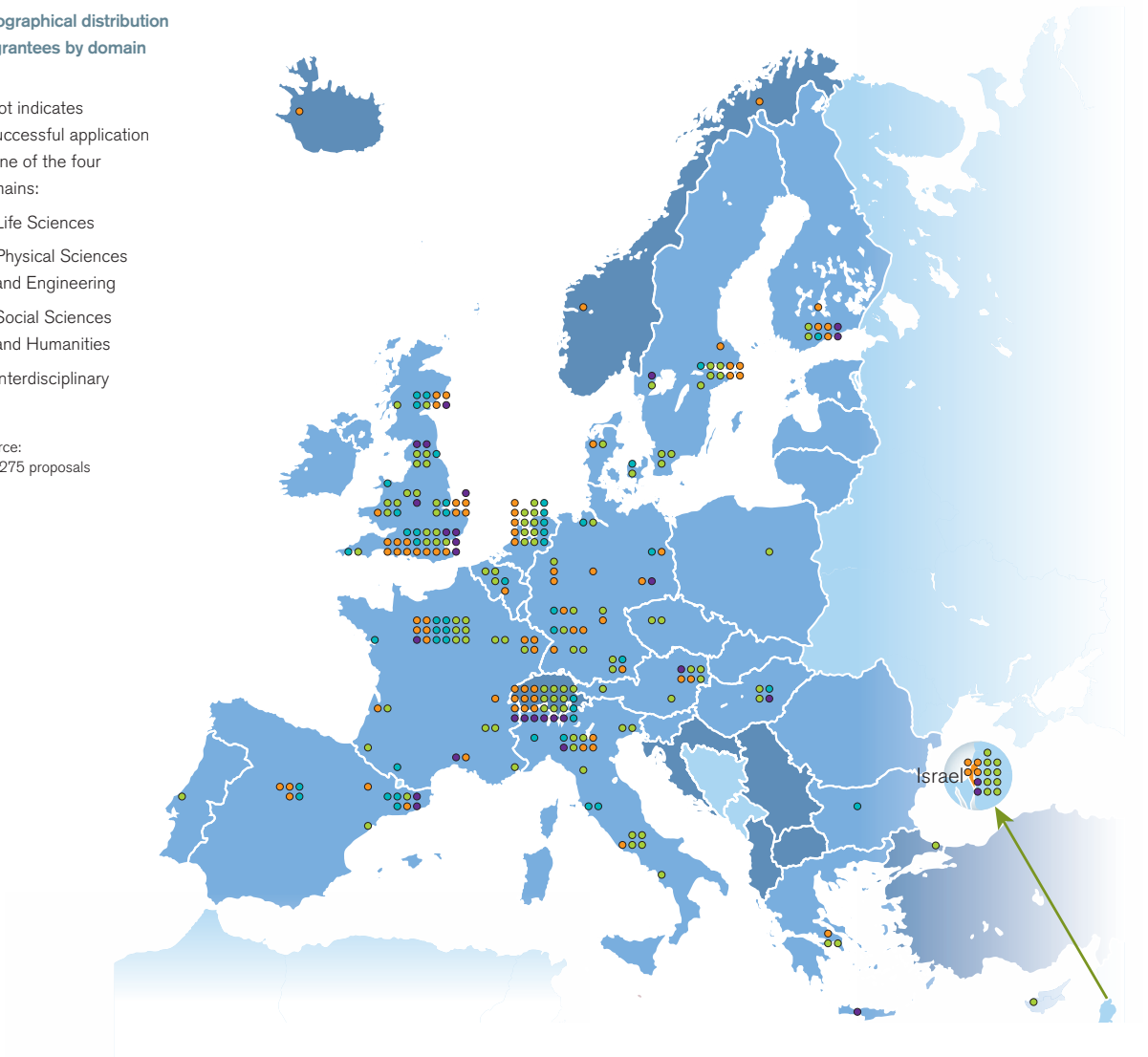
As intended, ERC funding is already having an impact on the ERA beyond the specific projects being supported.

Figure 7
Advanced Grants 2008
Geographical distribution of grantees by domain

A dot indicates a successful application in one of the four domains:

- Life Sciences
- Physical Sciences and Engineering
- Social Sciences and Humanities
- Interdisciplinary

Source:
Top 275 proposals



[4] These numbers are correct as of 30.12.08. Additional funding becoming available in 2009 is likely to allow a small increase in the number of grants.

Several participating countries have launched national initiatives offering the possibility for financial support to finalists of the first ERC Starting Grant competition whose proposals could not be funded by the ERC due to budgetary limits.

This is a clear sign of support of the ERC strategy for the next generation of research leaders. It is also an early acknowledgement of the intrinsic quality of the ERC's peer-review evaluation mechanisms, which will be further developed and refined based on experience. It furthermore demonstrates the commitment of the ERC and national actors to work together.

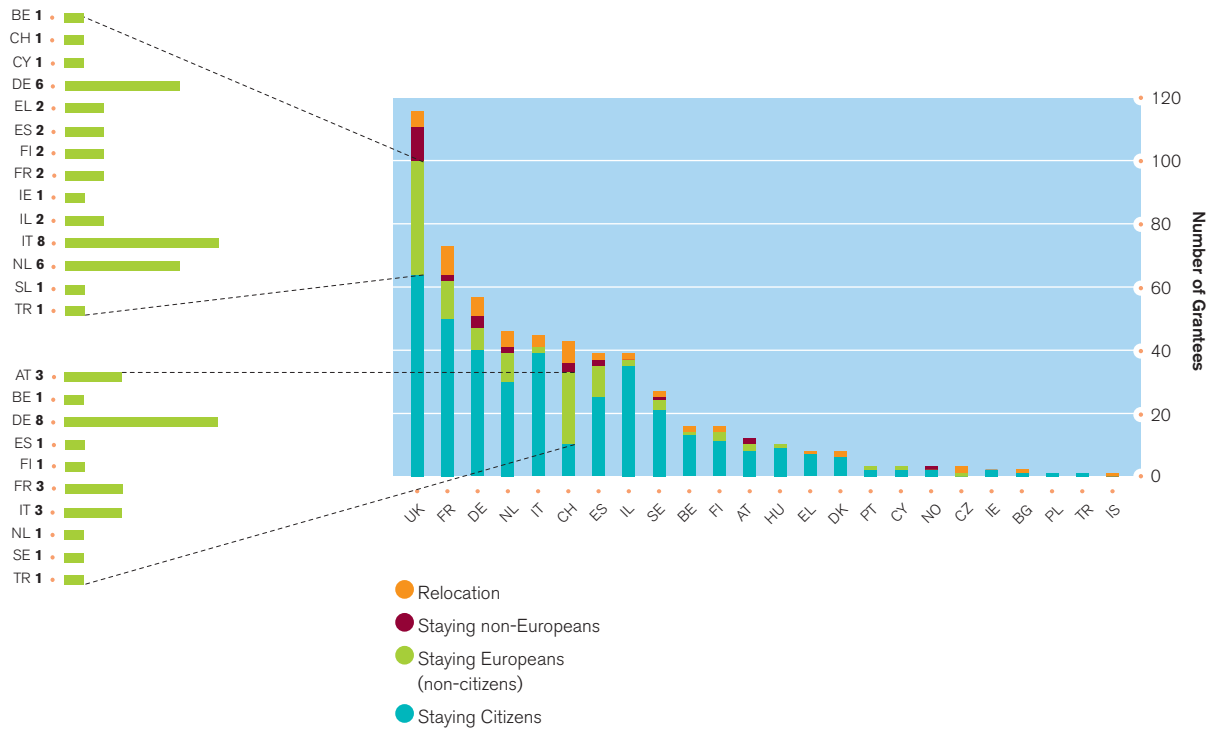
It is expected that the ERC will not only provide excellent research results, but will also affect many aspects of research, such as a general improvement in the quality of peer review, the creation of international benchmarks, the promotion of reforms in national research and higher education systems and the development of better strategies to become global players.

In this context, an interesting correlation has been observed between success in ERC funding calls (number of grants received) and national investment (Gross Expenditure in Research and Development, or GERD) across ERC grant hosting countries. Thus the ERC grant distribution reflects the reality that national R&D investments are distributed unevenly across the ERA. This correlation reinforces the notion that individual countries in Europe need to enhance their R&D intensity (using e.g. structural funds or their own

Figure 8

Number of ERC grantees (StG 2007 and AdG 2008) by country of host institution and origin of grantees

A considerable proportion of the principal investigators funded are non-nationals already residing and working in another country, particularly in Switzerland and the UK.



Source:
299 signed Starting Grants
275 top Advanced Grants proposals

national budgets, for example) as the continent steps up its efforts to recruit, retain and repatriate top talent.

The ERC's strategy of allowing the Principal Investigator 'grant portability' makes possible the development of new and existing centres of excellence. There has been a great deal of competition amongst European research and higher education institutions seeking to attract and host prestigious ERC grant holders. Some national institutions are offering incentives to potential applicants to participate in ERC schemes.

Most principal investigators are nationals of the country in which their host institution is located. However a considerable proportion of the principal investigators funded are non-nationals already residing and working in another country, particularly in Switzerland and the UK, reflecting the highly internationalised research systems in these two countries (see Figure 8).

Looking at the number of successful grantees in terms of the size of the researcher population in each country shows another picture (see Figure 9).

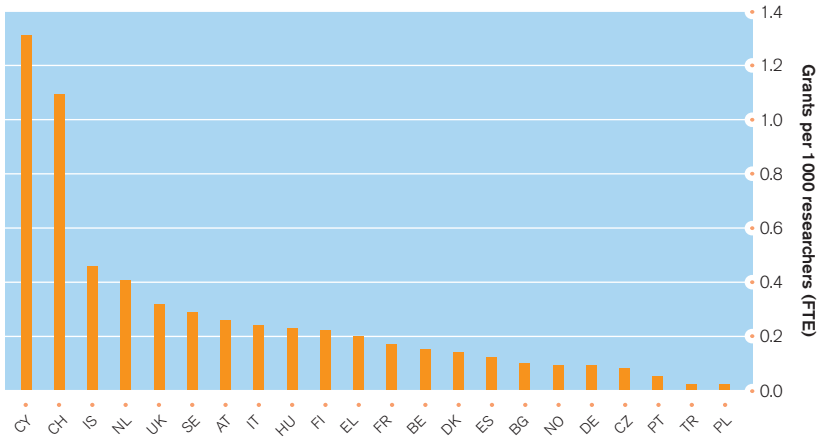
Figure 9

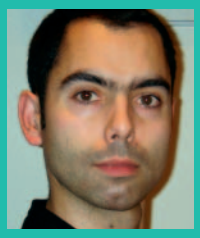
Advanced Grants per 1 000 researchers (FTE*)

In general, the number of grants to institutions in a country, reflects the population size and absolute R&D budget of that country, as would be expected. However looking at the number of grantees by the number of researchers in each country gives another perspective.

* FTE: Full-time equivalent

Source:
Eurostat 2006/2007
Data not available for Israel (IL)
275 top proposals





José Henrique Veiga Fernandes (Portuguese) • Understanding how animals orchestrate their functions in health and disease motivated José Henrique Veiga Fernandes to become a veterinary doctor in 1996. He then decided to further his studies by joining the PhD programme of Universidade do Porto in Portugal. In 2006, José Henrique was appointed Senior Investigator Scientist at the National Institute for Medical Research in the UK, and became Principal Investigator of Instituto de Medicina Molecular in Portugal in 2008.

ERC Starting Grant Call 2007

- Research domain: Life Sciences
- Host Institution: Instituto de Medicina Molecular (Portugal)
- Project title: Role of the proto-oncogene Ret during lymphocyte development and function (RetImmuneFunction)

There is growing evidence that molecules classically allocated to the nervous system function, such as the neurotrophic factors, can also regulate lymphocyte biology. The neurotrophic family includes the glial cell line-derived neurotrophic factor (GDNF) family ligands (GFLs) that signal through the receptor RET (ret proto-oncogene), which in turn is expressed by some immune cells. The aim behind this ERC project is to investigate the function of RET and GFLs in the immune system.

Maria Leonor Peña Chocarro (Spanish) • In 1988, Maria Leonor Peña Chocarro received her Bachelor of Arts in Prehistory and Archaeology from Universidad Autónoma de Madrid in Spain. In 1990, she obtained a Master of Science in Archaeology, followed by a doctorate in 1995 from the Institute of Archaeology at the University College London in the UK. Maria Leonor is currently based at Centro de Ciencias Humanas y Sociales Madrid, Spain, where she maintains an active role in the Archaeobiology Research Group.

ERC Advanced Grant Call 2008

- Research domain: Social Sciences and Humanities
- Host Institution: Agencia Estatal Consejo Superior de Investigaciones Científicas (Spain)
- Project title: Origins and spread of agriculture in the south-western Mediterranean region (AGRIWESTMED)

Research over the past 40 years has provided an invaluable dataset on crop domestication and the spread of agriculture in Europe. There are, however, important areas that remain almost unexplored and for which data is still limited, such as the western Mediterranean region. The focus of the ERC project will be on one of the most fascinating events in the long history of the human species: the origins and spread of agriculture. The project will approach the study of the arrival of agriculture into the western Mediterranean region by investigating various interrelated research areas including archaeology, archaeobotany, geoarchaeology, isotope studies, genetics and ethnoarchaeology.

3. Independent, autonomous, science-driven: building the ERC

- A new concept in research funding for Europe
- Established under independent scientific leadership
- Autonomy and integrity guaranteed by the European Commission

3.1. The Scientific Council

Meetings

The Scientific Council held regular meetings in 2008 across Europe, usually at the invitation of national authorities (see Figure 10). Meeting in different cities of countries which are either EU Member or Associated States is a way of making the Scientific Council's presence felt in different places covered by the 'Ideas' Specific Programme. It has become a tradition that public events are organised in conjunction with Scientific Council plenary meetings, to allow interaction with the local scientific community. Such events were organised in 2008 in Athens, Berne and Vilnius.

An informal and brainstorming 'Strategy Retreat', hosted by the Fondation 'Les Treilles', was held between 14 and 16 October in Tourtour, France. The intention of this retreat was to enable more in-depth discussion in a non-institutional environment. The Scientific Council looked at the lessons learnt from the first three years of the Scientific Council's activities, analysed the outcome of the first two calls for proposals and formulated strategic orientations for the coming years.

Championing ideas

The ERC has worked on ensuring its own visibility and that of the 'Ideas' Specific Programme it implements. ERC grantees have been very popular with the media. From print to audiovisual forms, the media has published stories on ERC grantees, portraying their careers, describing their fascination for research and highlighting the significance of ERC funding in their research ambitions.

This media attention, together with the enthusiasm and personal commitment of the first Starting Grantees, resulted in very positive coverage in taking the ERC's reputation far beyond Europe's borders. The announcement of the first Advanced Grant winners also received considerable attention, being followed by many press releases from the principal investigators' host organisations and good press coverage.

Figure 10
Scientific Council meetings in 2008 and planned meetings in 2009

2008

27-29 February, Athens
28-30 April, Brussels
1-3 July, Berne
10-12 September, Vilnius
14-16 October, Strategy Retreat, Les Treilles (Tourtour, France)
17-19 December, Brussels

2009

11-12 March, Istanbul
28 April, Brussels
30 June – 1 July, Warsaw
12 October, Brussels
15 December, Israel

Significant ERC events included an event organised by the French EU Presidency on 7 October in Paris ([5, 6]), 'The European Research Council for a policy of excellence: the first award winners pave the way'. The conference served to take a look back at the first year of the ERC, draw lessons and share the experience of 10 ERC Starting Grantees with the scientific community.

The ERC was also represented at a number of other events related to science and research around Europe, increasing its visibility with stakeholders. The ERC's presence and involvement at science fairs and conventions with an international scope is also a very important cornerstone of its outreach strategy in order to assure visibility and raise awareness on its grant schemes in Europe and beyond.

Strategic Development in 2008

The view of the Scientific Council is that despite initial difficulties, such as recruitment issues in setting up the ERC Executive Agency, delays in experts' compensation and implementation of granting procedure, there is a strong commitment towards the success of the ERC by the Commission, the Scientific Council and the wider research community.

The upcoming independent review of the ERC structures and mechanisms offers an opportunity to systematically evaluate the state of play, analyse any shortcomings and devise means of improving the situation within the possibilities of the Community's existing legislative framework, or where necessary, any new legislative proposals made by the Commission.

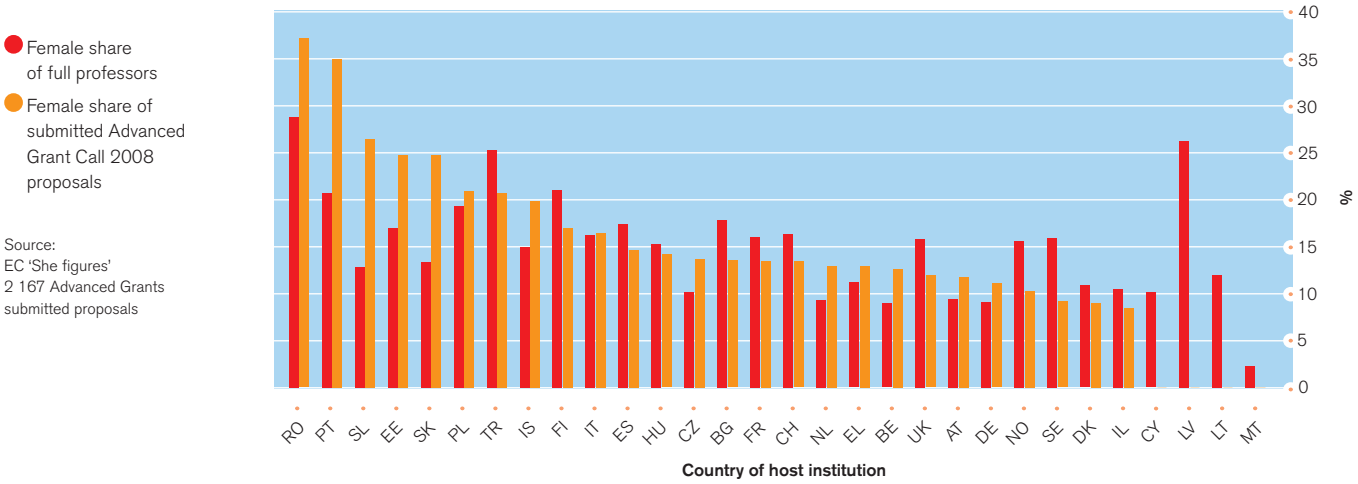
The scientific community's response to the first call and the first signs of the grants' impact on the ERA such as the complementary initiatives being taken by several national research funding agencies, led the Scientific Council to put further emphasis on the ERC Starting Grant scheme. This resulted in additional funding for this scheme, thus deviating from the '1/3 Starting Grant – 2/3 Advanced Grant' rule that had been applied so far. This measure is expected to be reflected in the 2010 calls with a share closer to 50/50 for the 2 schemes.

The Scientific Council has also considered possible incentives that could be introduced in both grant schemes to improve the subscription by scientists from Third Countries and the attractiveness of host institutions in certain participating countries and regions, as well as the participation of female scientists, especially in the ERC Advanced Grant call.

The gender distribution of StG and AdG grantees broadly reflects the demographics of professorships in Europe. In the StG call, there were equal success rates for men and women in the physical sciences and engineering domain, higher rates for men in the Life Sciences, and higher rates for women in the Social Sciences and Humanities. In contrast, all three research domains in the AdG call (especially the Physical Sciences and Engineering domain) showed higher success rates for male than for female applicants. These differences may reflect two features: the current scarcity of female researchers that are full professors in Europe, and the fact that more than 23% of the ERC panellists are female scientists (as noted earlier, panellists cannot apply for an ERC grant during the year they are on the panel) (see Figure 11).

Figure 11
Female share of full professors and female share of Advanced Grant 2008 submitted proposals

The gender distribution of proposals submitted for the Advanced Grant Call 2008 broadly reflects the demographics of professorships in Europe.



(5) Conference website: see http://www.eurosfaire.prd.fr/conference_erc/
(6) Web streaming: see http://www.canalc2.tv/video.asp?idEvenement=423

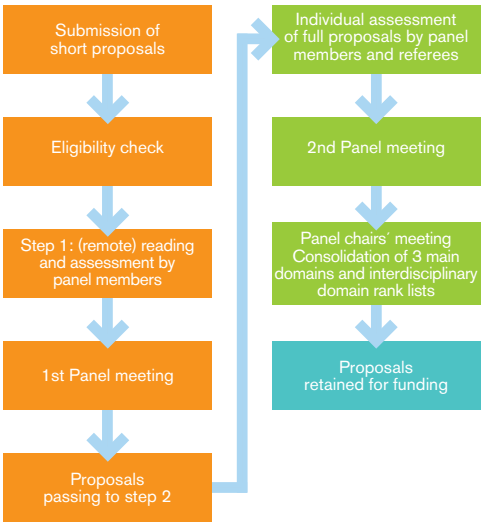
In 2008, some refinements and adjustments to the established strategy were also required in view of the increasing budget of the 'Ideas' Specific Programme which allowed calls for both Starting and Advanced Grants under the same annual budget for the first time.

Adjustments were made to fine-tune the operation of the ERC Starting Grant on the basis of the 2007 experience, where three times more applications than anticipated had been received. This had put considerable strain on the ERC Dedicated Implementation Structure's administrative and IT resources as well as on the evaluation panels. As a consequence of the high number of applications, the overall success rate was only in the order of 3%.

A number of measures were therefore introduced to achieve a more acceptable success rate while maintaining the quality of proposals. These included benchmarks with respect to the scientific track record of applicants and a restriction on re-submission of proposals.

In order to manage high levels of expected demand, the Scientific Council had already established that the first two Advanced Grant calls (2008 and 2009) should be linked, to make available a cumulative budget of about EUR 1 billion to applicants over these two consecutive years. In order to ensure equal treatment of all applicants, the Advanced Grant sections of the work programme were not materially revised with respect to the previous work programme (see Figure 12).

Figure 12
ERC Advanced Grants: submission, evaluation and selection



The Scientific Council further emphasised the need for potential host institutions to make appropriate efforts to attract and retain scientists and scholars of the calibre to be awarded an ERC grant.

Adjustments were made by the Scientific Council to the ERC's peer review system, focussing on the handling of interdisciplinary proposals, the ERC's communication strategy and avoiding conflicts of interest among peer reviewers. The Scientific Council also further developed its existing Statement on Open Access by publishing its Guidelines for Open Access in coordination with the European Commission's 'FP7 Open access pilot' initiative.

Further details can be found here:
http://ec.europa.eu/research/science-society/index.cfm?fuseaction=public.topic&id=1660

To further develop or optimise the scientific strategy of the ERC, the Scientific Council will rely on regular monitoring of the quality of ERC operations, ad-hoc analyses of programme implementation and evaluation of the achievements and impact of ERC activities.

The monitoring and evaluation framework will:
- provide a sound evidence base to objectively assess the performance and impact of the ERC and make necessary adjustments;
- enhance the understanding of the dynamics in the ERA (and beyond) in order to recalibrate ERC strategies in view of changes in the wider context in which the ERC operates.

The Scientific Council has initiated a range of projects and studies to support the ongoing monitoring and evaluation work as well as the development of future strategy and funding policies. This is being implemented, according to the 'Ideas' Annual Work Programme, through a Coordination and Support Action (CSA), to solicit bottom-up proposals for relevant studies and analysis and issue calls for tenders for services on specific topics, and to draw on external expertise through expert contracts. Following a first call for proposals in 2007, two projects were selected and a second call for proposals was launched in 2008.

Changes in membership

A total of 22 members were appointed by the Commission to the Scientific Council as founding members. The founding members of the Scientific Council were selected on the criteria set out in the Commission Decision of February 2007 (N° 2007/134/EC) establishing the ERC.

These include the requirement that the Scientific Council's composition would show it to be authoritative and independent, combining wisdom and experience with vision and imagination and reflecting the broad disciplinary scope of research. Individual members are chosen on their undisputed reputation as leaders, independent and committed to research.

During 2008, three members of the Scientific Council resigned on personal grounds: Professor Paul J. Crutzen, Professor Lord May of Oxford and Professor Manuel Castells. The issue of renewal of the membership of the Scientific Council has also been considered given that the first four-year term of the other members will expire soon. The best way to renew membership would be through a form of 'staged renewal' in such a way that members of the Scientific Council would be replaced in due time without putting the Scientific Council's continuity at risk.

In order to identify candidates to fill these three vacant posts, as well as determine the best mechanism for renewed membership in future, an 'Identification Committee' ([7]) was created in accordance with the provisions set out in the FP7 'Ideas' Specific Programme and the Commission Decision of 2 February 2007 setting up the ERC: this committee met three times in 2008. Following consultations with the scientific community, the Committee is expected to identify and propose to the Commission three possible candidates for the Scientific Council and also to propose a mechanism for the 'staged renewal' of the membership of the Council when members' terms expire.

3.2. The Executive Agency: towards full autonomy in 2009

Overview

The ERC's structure reflects its unique mission. It consists of a Scientific Council supported by a DIS. At the launch of the ERC in 2007, Directorate S of the European Commission's Research Directorate-General fulfilled the role of the DIS. In December 2007, the ERC Executive Agency was legally established by the Commission (Decision N°2008/37/EC) with a view to achieving administrative autonomy in 2009.

The DIS is responsible for all aspects of administrative implementation and programme execution. Directorate S of the Research Directorate-General has been responsible for implementing the ERC strategy and for setting up this agency.

Structure

According to the Steering Committee, established in 2008, the ERC Executive Agency is made up of three departments (see organigram in Figure 13, p. 26).

([7]) The members of this committee were Prof. Eero Vuorio (Chancellor of the University of Turku) as Chairman of the committee, Prof. Hélène Ahrweiler (Honorary Rector and Chancellor of the Academy of Paris), Prof. Zita Aušrelė Kučinskienė (Dean of the Faculty of Medicine, Vilnius University) and Prof. Arnold Schmidt (Professor at Vienna University of Technology) as members.

The Director has four supporting units responsible for support to the Scientific Council, communication, internal audit and the accounting chief under direct supervision. The three departments perform the main work of the Agency related to scientific management, grant management and internal support services.

Recruitment

Dr. Jack Metthey, Commission staff and Director of Directorate RTD/S, was concurrently nominated by the Commission Director *ad interim* of the ERC Executive Agency until a Director is appointed for the Agency.

Apart from the Director, 16 other posts with the Agency having a management function were planned to be filled by Commission officials seconded with the Agency in the interest of the Service. By the end of 2008, all of these posts had been published.

The first recruitment of Agency staff took place in 2008 with a total of 215 vacancy notices being published.

Posts related to logistical and operational functions were filled first and included posts in the IT and Human Resources and Budget units within the Support Services Department. This allowed for the Agency to continue in building its infrastructure and institutional capacity. Other priority areas included scientific management units dealing with operational matters, as are the units dealing with Starting and Advanced Grants.

By the year's end, a number of employees had already taken up duties with the ERC Executive Agency and are presently working alongside staff from Directorate S of the Research Directorate-General of the Commission on both the implementation of the programme and the further growth of the Agency (see Figure 3, p. 11). In addition, 11 scientific officers, engaged in evaluation and finalising arrival dates and panel assignments, have been loaned by the Directorates of the Research Directorate-General to the ERC Executive Agency (see Figure 14, p. 27).

The ERC Executive Agency's staff is subject to the Staff Regulations and the Conditions of Employment of Other Servants of the European Communities.

Location

Three proposals were shortlisted by the Commission services for premises to house the ERCEA. Eventually, the choice fell on the 'Covent Garden' building close to Brussels' Gare du Nord and the city's botanical park, as the place which fulfils the agency's requirements.

By the end of 2008, 25 ERC staff members dealing with logistics, experts' reimbursement, communication and document management were already working in the building. The rest of the staff is expected to have moved in stages to the building by mid-2009.

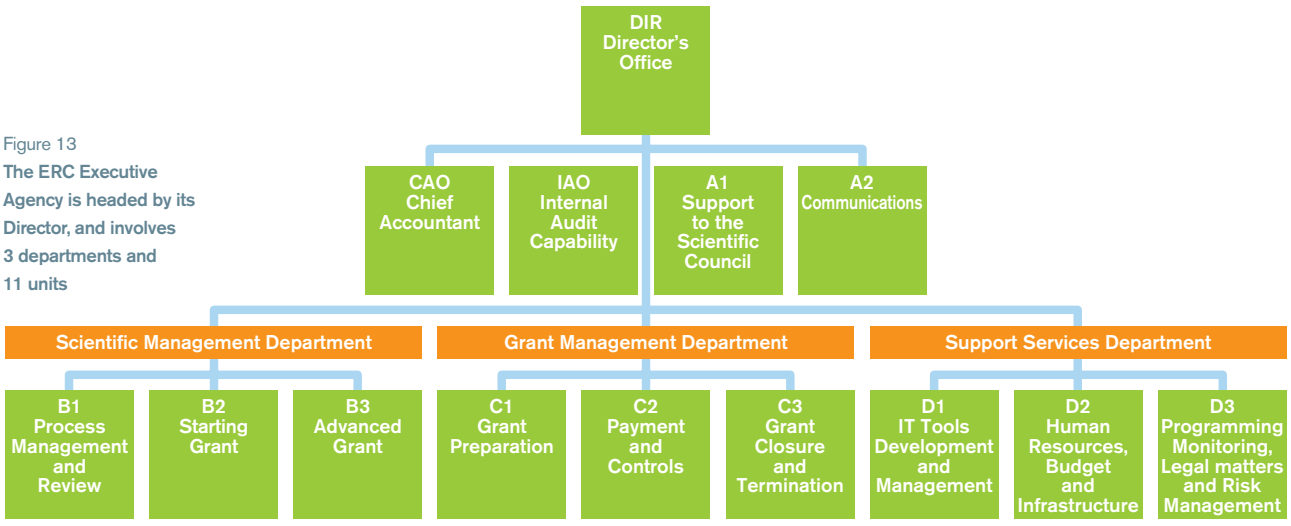


Figure 13
The ERC Executive Agency is headed by its Director, and involves 3 departments and 11 units

Clear and transparent communication lines

It is important that the ERC Executive Agency works closely both with the Scientific Council and the Commission.

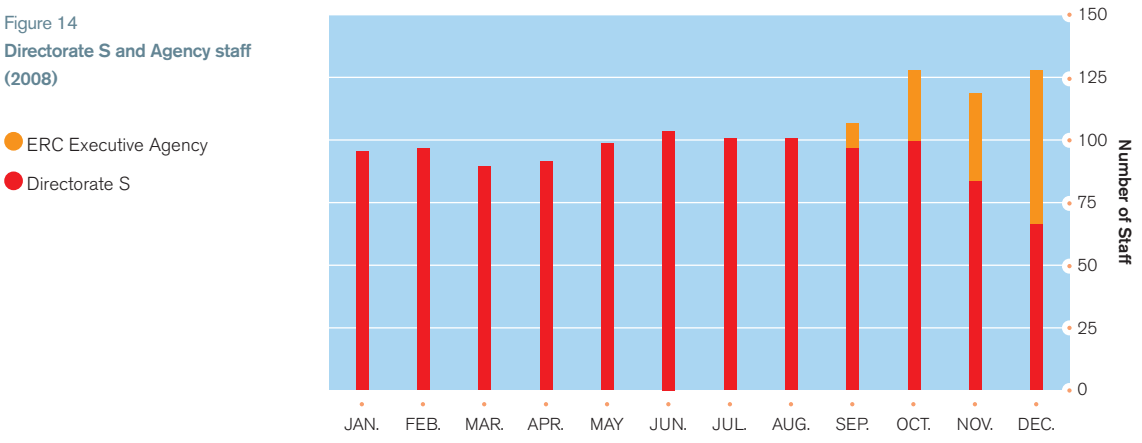
The Secretary-General of the ERC is selected by the Scientific Council and the duties include ensuring effective liaison between the Scientific Council, the DIS and the Commission. He is also responsible for monitoring, on behalf of the Scientific Council, the effective implementation of its strategy and positions adopted by the DIS. The current Secretary-General of the ERC is Professor Ernst-Ludwig Winnacker. Professor Andreu Mas-Colell will take over from July 2009 to December 2011.

Co-ordination between the Agency and the Scientific Council is ensured through regular meetings of an 'ERC Board' attended by the Director of the Agency, the Chair and the two Vice-Chairs of the Scientific Council and the Secretary-General of the ERC.

The Commission exercises its supervisory responsibilities over the activities of the Agency, as it does with all Executive Agencies, through a Steering Committee. The ERC EA Steering Committee is made up of three Commission officials and is chaired by the Director-General of DG Research. But uniquely, the ERC Executive Agency Steering Committee also has two external members, Professor Mathias Dewatripont from the ERC Scientific Council and Dr. Catherine Cesarsky, a leading member of the European research community. In addition, the ERC Secretary-General and the ERC Executive Agency Director are observers. This membership is designated by Commission Decision of 2008 to ensure coherence with the other ERC governance structures.

Once all DIS responsibilities have been delegated to the Agency, according to the Delegation Act determined by the Commission, the Commission will still need to ensure smooth liaison with the 'Ideas' Specific Programme Committee where the governments of the 27 EU Member States are represented.

Figure 14
Directorate S and Agency staff (2008)



Gilles Roger Charles Pourtois (Belgian) • After studying psychology at the Catholic University of Louvain in Belgium, Gilles Roger Charles Pourtois continued his studies at Tilburg University in the Netherlands, where he received his PhD in Cognitive Neuropsychology in 2002. Gilles spent the following five years at the University of Geneva in Switzerland working in the Neurology & Imaging of Cognition Laboratory and the Swiss Center for Affective Sciences, and has now relocated to Ghent University in Belgium.

ERC Starting Grant Call 2007

- Research domain: Social Sciences and Humanities
- Host Institution: Universiteit Gent (Belgium)
- Project title: How anxiety transforms human cognition: an affective neuroscience perspective (Anxiety & Cognition)

The main goal of this ERC project is to better understand how (subclinical) anxiety may modulate specific cognitive functions, including selective attention and decision making. Using standard behavioural and psychophysiological measures in low versus high anxious adult participants, the research will address how anxiety may dynamically shape attention and decision-making processes. Costs of anxiety on cognition will eventually be delineated in order to propose new revalidation schemes in clinical and health psychology; the aim is to reduce adverse experiential effects of anxiety on cognition.

Xiangqian Jiang (British) • At age 15, Xiangqian Jiang's schooling was cut short when she was sent to work as a chassis assembly worker during Chairman Mao's Cultural Revolution in China. She never gave up on her ambition to become a scientist, however, and taught herself mathematics, physics and engineering to degree level. Xiangqian gained high marks on the Master of Science entrance exam at Huazhong University of Science and Technology in China, and went on to complete her PhD. In 2003, she became Professor of Precision Metrology at the University of Huddersfield in the UK. In 2006, she was awarded both a Royal Society Wolfson Merit Award and the Outstanding Woman of Achievement Award (Lloyds TSB).

ERC Advanced Grant Call 2008

- Research domain: Physical Sciences and Engineering
- Host Institution: University of Huddersfield (United Kingdom)
- Project title: Fundaments and principles for measurement and characterisation of 21st century science and engineering surfaces (Surfund)

This ERC project will explore fundamental, mathematical building blocks and enable optical on-line/in-line measurement for surface measurement, and characterisation for ultra/nano-precision freeform surfaces (non rotational and translational symmetric surfaces) and deterministically-patterned surfaces. These are vital for making key areas of 21st century science possible, and could be used in areas such as high-power laser-energy systems, the proposed 42-metre European Extremely Large Telescope (E-ELT), energy efficient jet engines, human-joint implants, and MEMS/NEMS nanotechnology applications.

4. An emerging world class frontier research capability: outlook for 2009

Adding value to national funding schemes, strengthening European research structures, benefiting the economy, and serving society

By challenging the most original minds to develop breakthroughs at the frontiers of science, the ERC hopes to foster those unpredictable discoveries that can change the course of human understanding, thus opening up new avenues to technological progress and solving central social and environmental problems.

The ERC aims to bring about a wide range of short-and long-term benefits:

- The ERC will be able to channel funds into the most original ideas and promising opportunities, with a degree of flexibility not always possible in national funding schemes
- The ERC Grant schemes will attract the best researchers to work in Europe, irrespective of their country of origin
- The ERC will stimulate research organisations to do more in support of young and starting researchers
- The ERC will help nurture a science-based industry and create a greater impetus for the establishment of research-based spin-offs
- The ERC could provide a mechanism for investing rapidly in research on new and emerging issues confronting society

The ERC recognises the need to achieve excellence in its own organisation and operations. In order to help achieve this goal, the ERC is committed to being a 'learning organisation' which will continuously strive to make improvements. Feedback from the scientific research community, national councils, academies and funding agencies and the European institutions is therefore necessary and welcome in order for the ERC to have the success and impact that we all wish to see.

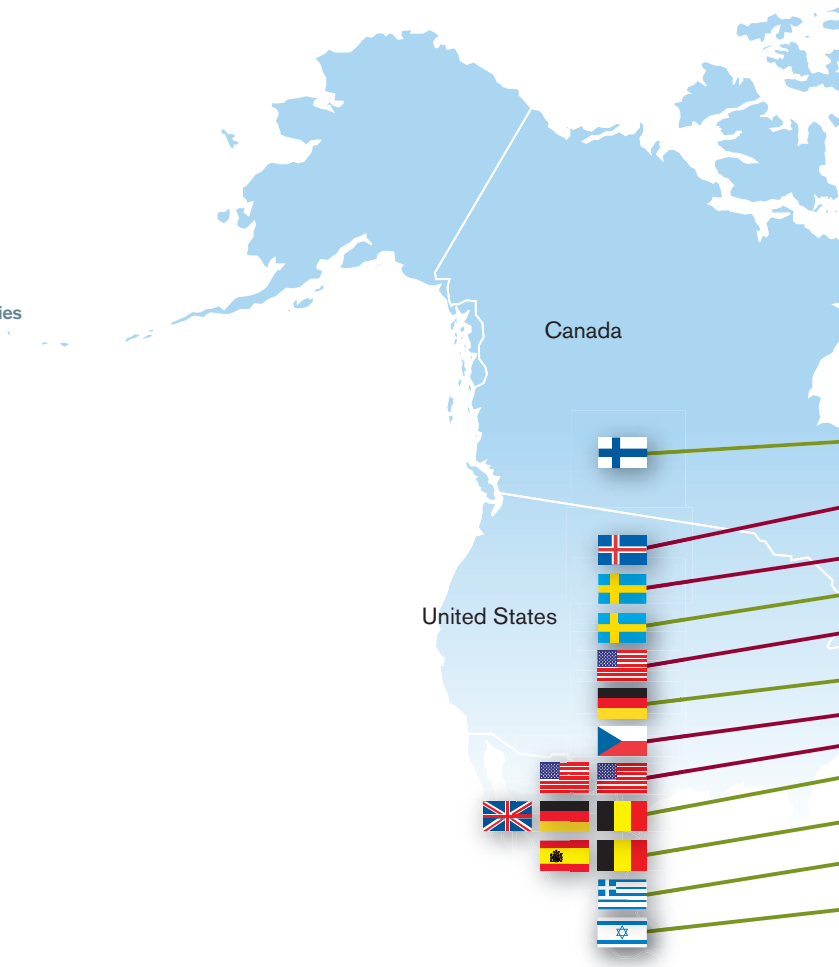
Adapt, refine, improve

Based on lessons learnt, the ERC's grant schemes are expected to be further developed in future to ensure that they continue to support excellence and that they are administered in an efficient way.

Eligibility and evaluation adjustments are to be introduced in time for the 2009 Starting Grant call. Criteria applied successfully for the 2008 Advanced Grants, will be retained. In the case of Starting Grants, applicants will be expected to show a degree of research independence and maturity.

A relatively small number of grantees in the first calls came from outside Europe and most of these were European citizens returning from the US. This effect was stronger for up-and-coming researchers than for established researchers. Measures intended to increase the attractiveness of EU and associated countries to researchers from Third Countries are being considered (see Figure 15).

Figure 15
Attracting researchers from Third Countries



- Starting Grants 2007
- Advanced Grants 2008

Note: Colours of the arrows indicate the call
Flags indicate nationality of grantee

Source: Top 275 Advanced Grants Call 2008
Top 299 Starting Grants Call 2007

The ERC is keen to ensure that funding is not confined only to the wealthier countries and regions of Europe. ERC grants should support individual excellence in research across the whole of the European Union and FP7 associated countries, including countries and regions that are less well endowed with research facilities and infrastructures.

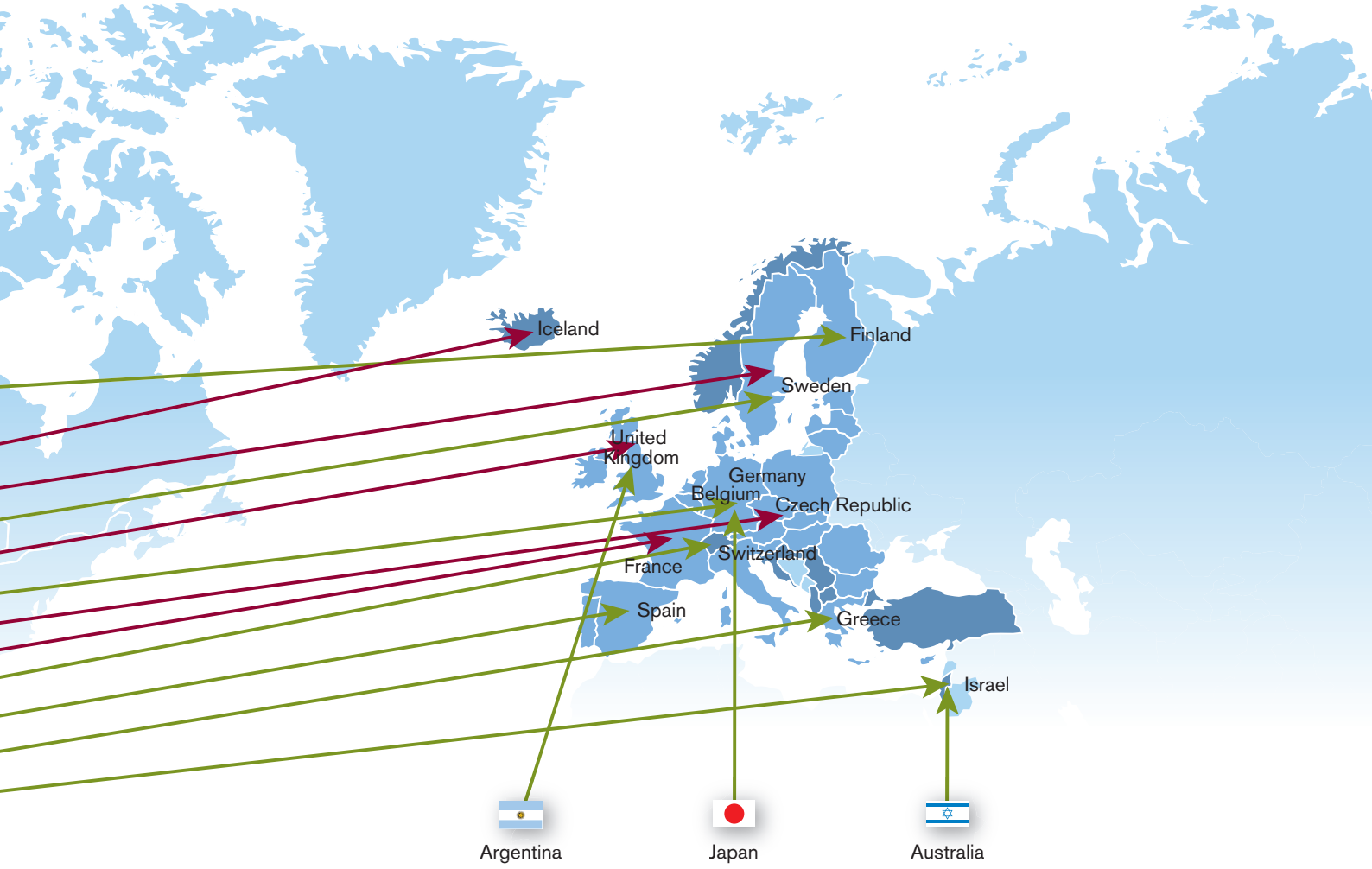
In line with the 'Ideas' Specific Programme, the ERC continues to closely monitor the important question of gender equity. In addition, the ERC has alerted the evaluation panels to be open to applicants of both genders that have unconventional career tracks, as these applicants can often bring a broader perspective to innovative research proposals. Importantly, the Scientific Council has decided to increase the relative weight of the Starting Grants compared to the Advanced Grants budget. In addition to augmenting the overall numbers of StG investigators, this is likely to increase the overall success rate for women.

Full Autonomy for the Agency

Preparations are underway for granting administrative autonomy to the ERC Executive Agency. The Agency will take over the implementation of the operational budget (i.e. the budget of the FP7 'Ideas' Specific Programme) and the implementation of the operating budget related to its workings as an Agency.

Independent Review

In 2009, a comprehensive review of the ERC's structures and mechanisms will be undertaken by an independent committee of experts appointed by the Commission, in the light of experience and in close consultation with the Scientific Council as set out in the 'Ideas' Specific Programme. In order to ensure an objective and impartial exercise, independent experts will be invited to participate in this committee, which is hoped to organise the review within the term of the present College of Commissioners.



Annex 1

Members of the ERC Scientific Council

Prof. Dr Fotis C. KAFATOS (EL)
Chairman
Immunogenomics Chair, Imperial College London

Dr Daniel ESTEVE (FR)
Vice-Chair
Research Director, CEA Saclay,
Service de Physique de l'état condensé – SPEC

Prof. Helga NOWOTNY (AT)
Vice-Chair
Professor emeritus, ETH Zürich
Vienna Science and Technology Fund (WWTF)

Dr Claudio BORDIGNON (IT)
Scientific Director and Professor of Haematology,
the San Raffaele Institute, Milan

Prof. Sierd CLOETINGH (NL) (*)
Royal Netherlands Academy, Professor of Earth
Sciences, VU University, Amsterdam

Prof. Mathias DEWATRIPONT (BE)
Professor of Economics, Université Libre de
Bruxelles, European Centre for Advanced Research
in Economics and Statistics – ECARES

Prof. Carlos DUARTE (ES) (*)
Research Professor, Spanish Research Council (CSIC)

Prof. Pavel EXNER (CZ)
Scientific Director, Doppler Institute, Prague

Prof. Dr Hans-Joachim FREUND (DE)
Director, Fritz-Haber-Institut der Max-Planck-
Gesellschaft, Department of Chemical Physics, Berlin

Prof. Dame Wendy HALL, DBE, FREng (UK)
Head of School of Electronics and Computer
Science, University of Southampton

Prof. Carl-Henrik HELDIN (SE)
Director and Professor in Molecular Cell Biology,
Ludwig Institute for Cancer Research,
University of Uppsala

Prof. Dr Michal KLEIBER (PL)
Head of the Computational Science Department,
Institute of Fundamental Technological Research,
Polish Academy of Sciences

Prof. Norbert KROO (HU)
Vice-President, Hungarian Academy of Sciences

Prof. Maria Teresa LAGO (PT)
Full Professor, School of Sciences, Porto University

Prof. Henrietta MOORE (UK) (*)
William Wyse Chair of Social Anthropology,
Cambridge University

Prof. Christiane NÜSSLEIN-VOLHARD (DE)
Direktor, Max-Planck-Institut für Entwicklungsbiologie
Abteilung III (Genetik)

Dr Oscar MARIN PARRA (ES)
CSIC Group leader, Instituto de Neurociencias de Alicante

Prof. Leena PELTONEN-PALOTIE (FI)
Professor of Medical Genetics and Molecular Medicine,
University of Helsinki and National Public Health Institute

Prof. Alain PEYRAUBE (FR)
Directeur de Recherche, CNRS, Paris
Directeur d'Études of Chinese Linguistics,
École des Hautes Études en Sciences Sociales, Paris

Dr Jens ROSTRUP-NIELSEN (DK)
Director R&D Division, Haldor Topsoe A/S
Adjunct professor and Board Member,
Technical University of Denmark

Prof. Salvatore SETTIS (IT)
Director and Professor, Scuola Normale Superiore, Pisa

Prof. Dr med. Rolf ZINKERNAGEL (CH)
Head, Institute of Experimental Immunology,
University Hospital, Zürich

Former Members of the Scientific Council: (until April 2008)

Prof. Manuel CASTELLS (ES)
Research Professor of Information Society,
Open University of Catalonia, Barcelona
Professor Emeritus of Sociology and Planning,
University of California, Berkeley

Prof. Paul J. CRUTZEN (NL)
Emeritus Director, Atmospheric Chemistry Division,
Max Planck Institute for Chemistry, Mainz
Professor, Scripps Institution of Oceanography,
University of California, San Diego

Prof. Lord MAY of OXFORD, OM, AC (UK)
Dept of Zoology, Oxford University

(*) Since April 2009

Annex 2

ERC Starting Grant and ERC Advanced Grant Panel Structure and Chairs

Life Sciences

ERC Starting Grant		ERC Advanced Grant	
LS1	Molecular and structural biology and biochemistry: **Prof. Erik Boye**	LS1	Molecular and structural biology and biochemistry: **Prof. Maciej Zylicz**
LS2	Genetics, genomics, bioinformatics and systems biology: **Prof. Janet Thornton**	LS2	Genetics, genomics, bioinformatics and systems biology: **Prof. Stylianos Antonarakis**
LS3	Cellular and developmental biology: **Prof. Kai Simons**	LS3	Cellular and developmental biology: **Prof. Maria Leptin**
LS4	Physiology, pathophysiology and endocrinology: **Prof. Ole Peterson**	LS4	Physiology, pathophysiology and endocrinology: **Prof. Nancy Elisabeth Hynes**
LS5	Neurosciences and neural disorders: **Prof. Anders Björklund**	LS5	Neurosciences and neural disorders: **Prof. Ole Petter Ottersen**
LS6	Immunity and infection: **Prof. Philippe Sansonetti**	LS6	Immunity and infection: **Prof. Albertus Domenicus Marcellinus Erasms Osterhaus**
LS7	Diagnostic tools, therapies and public health: **Prof. Giulio Cossu**	LS7	Diagnostic tools, therapies and public health: **Prof. Rino Rappuoli**
LS8	Evolutionary, population and environmental biology: **Prof. Ilkka Hanski**	LS8	Evolutionary, population and environmental biology: **Prof. Isabelle Olivieri**
LS9	Applied life sciences and biotechnology: **Prof. Lars Walloe**	LS9	Applied life sciences and biotechnology: **Prof. Inge Broer**

Social Sciences and Humanities

SH1	Individuals, institutions and markets: **Prof. Torsten Persson**	SH1	Individuals, institutions and markets: **Prof. Tony Atkinson**
SH2	Institutions, values, beliefs and behaviour: **Mr Michel Wieviorka**	SH2	Institutions, values, beliefs and behaviour: **Prof. Andre Gingrich**
SH3	Environment and society: **Mr James Vaupel**	SH3	Environment and society: **Prof. Peter Nijkamp**
SH4	The Human Mind and its complexity: **Prof. Gretty Mirdal**	SH4	The Human Mind and its complexity: **Prof. Bernard Comrie**
SH5	Cultures and cultural production: **Prof. Glenn Most**	SH5	Cultures and cultural production: **Prof. Glen Warren Bowersock**
SH6	The study of the human past: **Mr Jacques Revel**	SH6	The study of the human past: **Prof. Wim Blockmans**

Mathematics, physical sciences, information and communication engineering, universe and earth sciences

PE1	Mathematical foundations: **Prof. Jean-Pierre Bourguignon**	PE1	Mathematical foundations: **Prof. Enrique Zuazua**
PE2	Fundamental constituents of matter: **Prof. Massimo Inguscio**	PE2	Fundamental constituents of matter: **Prof. Gerhard Rempe**
PE3	Condensed matter in physics: **Prof. Mikko Paalanen**	PE3	Condensed matter physics: **Prof. Jerzy Langer**
PE4	Physical and analytical chemical sciences: **Prof. Robert Schlögl**	PE4	Physical and analytical chemical sciences: **Prof. Manfred Kappes**
PE5	Material and synthesis: **Prof. Jay Siegel**	PE5	Materials and synthesis: **Prof. Gianfranco Pacchioni**
PE6	Computer science and informatics: **Prof. Cornelis van Rijsbergen**	PE6	Computer science and informatics: **Prof. Micheline Beaulieu**
PE7	Systems and communication engineering: **Prof. Palle Jeppesen**	PE7	Systems and communication engineering: **Prof. Ton Koonen**
PE8	Products and process engineering: **Prof. Erkki Leppävuori**	PE8	Products and process engineering: **Prof. Carlos Bernardo**
PE9	Universe science: **Prof. Guido Chincarini**	PE9	Universe sciences: **Prof. Thomas Henning**
PE10	Earth system sciences: **Prof. Katherine Richardson**	PE10	Earth system sciences: **Prof. Peter Liss**

Annex 3
Useful links

ERC Funded projects:
http://erc.europa.eu/index.cfm, choose **'Funded Projects'**

ERC National Contact Points:
http://erc.europa.eu/ncp

ERC Calls for proposals:
http://erc.europa.eu/callforproposals

ERC Guide for Applicants:
http://erc.europa.eu/pdf/ERC_Guide_for_Applicants.pdf

ERC Publications:
http://erc.europa.eu, choose **'Press & Public'**, then **'Promotional Material'**

Information on past and future events with ERC participation:
http://erc.europa.eu, choose **'Events'**

To receive ERC news alerts:
http://erc.europa.eu/newsalert

Annex 4

The host institutions of ERC grantholders must be situated in one of the Member States, or one of the Associated countries. It may also be an international European interest Organisation (such as CERN, EMBL, etc.) or the European Commission's Joint Research Centre.

EU Member States

- Belgium
- Bulgaria
- Czech Republic
- Denmark
- Germany
- Estonia
- Ireland
- Greece
- Spain
- France
- Italy
- Cyprus
- Latvia
- Lithuania
- Luxembourg
- Hungary
- Malta
- Netherlands
- Austria
- Poland
- Portugal
- Romania
- Slovenia
- Slovakia
- Finland
- Sweden
- United Kingdom

FP7 Associated countries

- Albania
- Bosnia and Herzegovina
- Croatia
- former Yugoslav Republic of Macedonia, the
- Iceland
- Israel
- Liechtenstein
- Montenegro
- Norway
- Serbia
- Switzerland
- Turkey

European Commission

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This report, prepared again this year under the authority of the ERC Scientific Council, sets out the ERC's activities and achievements in 2008. It will be disseminated widely to both the scientific community and other key stakeholders with the aim of building awareness and increasing the transparency of the ERC's strategy and operations.

Publications Office

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