Annual Report on the ERC

activities and achievements in 2007, prepared under the authority of the ERC Scientific Council



European Research Council



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# Annual Report on the **ERC**

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# COMMISSIONER'S INTRODUCTION

Just one year on from its creation, the European Research Council has already shown that this was an idea whose time had come. The vision and commitment shown by the Scientific Council and the staff of the dedicated Commission service have proven beyond any doubt that Europe is able to provide opportunities for exciting creative science that compete with the best in the world.

The ERC is a flagship of the EU's Seventh Framework Programme, and will play a vital role in developing the first class science base, on which the continent's future depends. That the ERC could be up and running so soon is testament to the commitment to its goals shared by the European Union, its Member States and the European scientific community. It is already clear that the ERC will make a significant contribution to the careers of researchers and to Europe's ability to attract the very best scientific talent.

I congratulate the ERC on its achievements in 2007 and look forward to further developments during 2008. These include the launch of the Advanced Investigator Grants and the setting-up of the European Research Council Executive Agency, which will reinforce the ERC's autonomy and continue the efficient, cost-effective administration of its grants.

The Commission has prepared an Annual Report on the ERC's operations and achievement of its objectives in 2007, and I am pleased that the Scientific Council has taken the initiative to prepare this publication which will be disseminated widely to the research community and other stakeholders to promote further the ERC and its activities.

Ima Pilot Janez Potočnik European Science and Research Commissioner



# PERSONAL MESSAGE FROM THE ERC PRESIDENT

The creation of the European Research Council (ERC) by the common action of the institutions of the European Union (the Commission, the Parliament and the Council) represents a landmark event for science policy in our continent. By this action, Europe is taking a decisive step towards the formation of a common European Research Area.

The Scientific Council, the independent strategic body of the ERC, is fully aware of the momentous responsibility that creation of the ERC, funded with 7.5 billion Euro over 7 years, represents. It pledges to continue to work diligently during its tenure, to promote leading-edge, individual investigator-initiated research and thus contribute to the creativity and competitiveness of Europe.

This report, prepared under the authority of the ERC Scientific Council and in collaboration with the Dedicated Implementation Structure sets out the ERC's activities and achievements in 2007. 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.

2007 has been an exciting and challenging year, where our ideas have been put to the test as we launched the first ERC grant schemes. We were gratified and somewhat stunned by the response of the research community to the ERC Starting Grant call, confirming the scientific excellence and diversity of talent that is to be found in Europe. The challenge now is to support such excellence and translate the knowledge generated for the benefit of Europe.

Based on our commitment to establish the ERC as an outstanding research funding agency that attracts the very best researchers, we are enthused by the start towards this objective in 2007, recognising the tremendous support from the scientific research community, national councils, academies and funding agencies, the European institutions and the colleagues in the Dedicated Implementation structure that have made this possible.

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



Prof. Helga Nowotny



Dr. Daniel Estève



Prof. Ernst-Ludwig Winnacker



José Silva Rodriguez



Jack Metthey

## 1. A SUCCESSFUL STARTING YEAR

The European Research Council (ERC) came officially into existence on 2 February 2007, by a Decision of the Commission<sup>(1)</sup>. This represented a landmark event for science policy in Europe. Building on the preparatory work of the Scientific Council and the Dedicated Implementation Structure (DIS)<sup>(2)</sup> during 2005-2006, the first year of its formal operation was a period of intense activity which saw the establishment of management structures and operating procedures, the successful completion of a highly subscribed first call for proposals and preparations for setting up the ERC's own Executive Agency.

#### ERC structure and leadership

The ERC Scientific Council, an independent, autonomous body consisting of 22 distinguished scientists from a broad range of fields, has the responsibility for setting the ERC's scientific strategy including establishing the annual 'Ideas' work programme and calls for proposals, designing the peer review systems, identifying the peer review experts, and communicating with the scientific community.

The Scientific Council members were nominated by Commissioner Potočnik in July 2005 and worked intensively to define the key principles and scientific operating practices of the ERC in preparation for the start-up.

Following its formal establishment, the Scientific Council members reaffirmed the election of its Chair and ERC President, Professor Fotis Kafatos, and the two Vice-Chairs and ERC Vice-Presidents, Professor Helga Nowotny and Dr. Daniel Estève.

Professor Ernst-Ludwig Winnacker, the first ERC Secretary General, took up his post in Brussels at the beginning of 2007, following his appointment by the Scientific Council in September 2006, to fulfil the important role of ensuring a close interaction and coordination between the Scientific Council, the DIS and the Commission.

To further assure its effective operation as well as its interaction with the Commission and the DIS, the Scientific Council set up an ERC Board, consisting of its Chair and Vice-Chairs, the ERC Secretary General. The Director of the DIS is invited to participate in these meetings.

During 2007 the DIS activities have been undertaken by the Directorate 'Implementation of the Ideas programme'

within the Commission's Directorate General for Research, under the responsibility of the Director General, José Silva Rodriguez and the Director Jack Metthey. The DIS extended its activities with a commensurate growth in staff numbers, supporting the Scientific Council in strategy development, implementing and managing the first call and peer review process and financial operations, and preparing the ground for the future Executive Agency.

# Developing the strategy and objectives of the ERC

The ERC has been given the mandate to deliver competitive research funding at the frontier of knowledge, and at EU level, thus adding value to and complementing national research funding schemes. This presents new and exciting opportunities for frontier research in Europe.

The Scientific Council has designed the ERC grant schemes to promote research excellence in all fields of knowledge and scholarship, and to secure the corresponding human capital, by both retaining in Europe and progressively recruiting from overseas some of the top research talent of both the current and the next generation. Through these schemes, the Scientific Council aims to improve conditions in the research sector, thus making scientific careers attractive in Europe. This approach has been welcomed by both policy makers and the research community.

### ERC Grant schemes

The ERC has developed and launched two 'core' schemes within the EU's Seventh Framework Programme. Both operate without predefined thematic priorities; individual research investigators have the opportunity to propose 'bottom-up' research projects including high risk, interdisciplinary projects, that are evaluated on the sole criterion of excellence. There are no restrictions on the nationality of the principal investigators to be funded by the ERC, but they must carry out their research within the European Union and associated countries.

The *ERC Starting Independant Researcher Grant* ('Starting Grant') recognises that there is a gap in funding opportunities for researchers in the early stage of their careers, as they move towards being independent research leaders in their own right. The grant supports researchers with a view to establish or consolidate their own independent research team.

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<sup>(1) 2007/134/</sup>EC; OJ L 57, 24.02.2007, p.14

<sup>(2)</sup> ibid, Article 9: The DIS shall be set up as an external structure, pending the establishment and operability of the external structure, its implementation tasks shall be executed by a dedicated service of the Commission

It provides a structure for transition from working under a supervisor to being an independent research leader.

**ERC Starting Grants:** Supporting the independent careers of excellent researchers, whatever their nationality, located in or moving to the Member States and associated countries, who are at the stage of starting or consolidating their own independent research team or, depending on the field, establishing their independent research programme.

The ERC Advanced Investigator Grant ('Advanced Grant') is focused on the most talented and innovative established researchers. Advanced Grants are intended to promote substantial advances in the frontiers of knowledge, and to encourage new productive lines of enquiry and new methods and techniques. Novel and unconventional approaches and investigations at the interface between established disciplines are encouraged, where high risk is justified by the possibility of a major breakthrough with an impact beyond a specific research domain or discipline. The very high standards required under this scheme have been made explicit and transparent, with the aim of encouraging self-assessment of potential applicants, establishing realistic expectations on the part of the research community, and managing the demand for such grants.

**ERC Advanced Grants:** Supporting excellent, innovative investigator-initiated research projects across the Member States and associated countries, directed by leading advanced investigators of whatever age, who have already established themselves as being independent research leaders in their own right.

Scientific leadership ability is a key attribute for success in these grant schemes. Along with the creativity and motivation of successful applicants, this is an essential factor necessary to transform Europe's research culture and provide the conditions for developing the knowledge and competence to benefit future generations and contribute to sustainable development in the EU as well as raising Europe's competitiveness in a globalised world.

Whilst the Scientific Council places much emphasis on providing new means for individual researchers, it has also recognised that the host institutions of researchers are critical partners in both supporting individual researchers and making the EU a more attractive place to do research. The ERC schemes therefore look to significant commitment and support of institutions in realising these objectives. Recognising that a researcher may need to change institution as part of his/her career development, the ERC allows grant portability based on clear scientific justification. This policy is an important component of building a stronger foundation for Europe's science base.

# Relations with stakeholders in Europe

By its existence, the ERC will enhance the performance of the European research system. The ERC and national funding bodies have important objectives in common – improving the climate for frontier research in Europe and the attractiveness of the research environment. The Scientific Council has been keen to learn from the ERC's peers in national research councils (European and overseas) and to engage in dialogue and appropriate collaboration. The ERC has already benefited from the support of national funding agencies, both in seconding national experts to the DIS, and providing expert support to assist in the Starting Grant evaluation.

#### International relations

The ERC addresses researchers all over the world. It will aim to ensure that a substantial proportion of panel members and referees are non-European. In developing the profile of the ERC as a highly prestigious, global institution, it seeks to engage in and influence international discussions of research and to have a prominent role on the global scene.

The ERC's main operational interest in relations beyond Europe has been to encourage applications to the Starting Grant scheme, focusing on the 'European diaspora' in North America as well as other parts of the world.

#### European Research Area

The creation of the ERC reflects an important shift in emphasis that is at the heart of the European Commission's vision for the future of the European Research Area (ERA), as put forward in the Green Paper 'The European Research Area: New Perspectives'. The Scientific Council made a detailed submission to the Commission in response to the Green paper emphasising, amongst other issues, the contribution of frontier research to innovation and competitiveness.





#### Open access

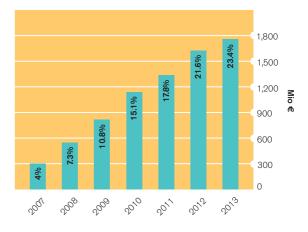
The Scientific Council has engaged actively in the debate on access and availability of publications and research results. It has adopted an 'open access' policy by requiring that all peer-reviewed publications from ERC-funded research projects are deposited in the appropriate Internet-accessible libraries within 6 months of publication.

# The budget for frontier research implemented by the ERC

The ERC will implement the Ideas specific programme budget for 2007-2013 which is  $\in$  7.51 billion (around 15% of the overall budget of the EU's Seventh Framework Programme) – an average of about  $\in$  1 billion per year for 7 years. Whilst this is a significant budget, it was known that this would be inadequate to achieve its full potential, particularly when compared to the current annual budgets of Councils with comparable scope, such as the US National Science Foundation (NSF) (ca.  $\in$  4.4 billion p.a.) and the National Institutes of Health (NIH) (ca.  $\in$  17.3 billion p.a.).

Although the budget available in the initial years is limited, as the programme develops and the ERC builds capacity, more substantial annual budgets will be available for supporting Europe's top researchers. The ERC anticipates spending only 3.5% of its available budget on administration and management, making it one of the most efficient organisations of this type world-wide.

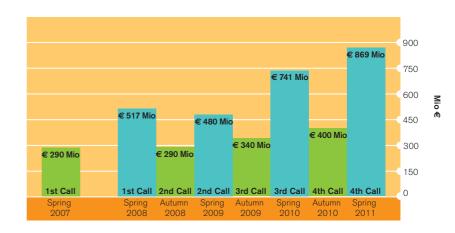
The Scientific Council has taken steps to optimise the use of the budget, aiming to establish, after the first



Annual budget evolution 2007–2013 The annual budget will increase during FP7 to more than €1.7 bn by 2013.

year, annual calls for proposals for both Starting Grants (allocated approximately 1/3 of the available budget) and Advanced Grants (allocated approximately 2/3 of the available budget).

In order to recognise the importance to have dedicated, focused time to spend on ERC projects, the level of ERC grants, subject to the project's needs, may be up to  $\in$  3.5 million for a period of 5 years for the Advanced Grant and up to  $\in$  2 million for a period of 5 years for the Starting Grant. The grant is awarded to an individual principal investigator (PI) working in a host institution, and it is for the principal investigator to assemble the research team appropriate to the needs of the project. These individual teams can be of national or transnational character, and grants will be flexible, allowing researchers to re-budget over the project lifetime in response to actual requirements.



# Prospective schedule: call publication and budget 2006–2011

The ERC will launch calls for proposals twice a year: Advanced Grants will be published in the winter with deadlines in the spring and Starting Grants will be published in the summer with deadlines in the autumn. The Ideas programme will also fund projects and studies to support the implementation and future strategy development of the ERC.



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## Communicating and promoting the ERC activities

Significant efforts have been made to ensure that the ERC communicates its activities effectively to the scientific community, and raises awareness with the wider public. This has resulted in the development of a number of key communication tools, products and channels.

Key milestones achieved in the start-up phase include:

- · establishment of the ERC website at http://erc.europa.eu (launched on 14 February 2007);
- · production and broad dissemination of a brochure introducing the Scientific Council to 75 000 contacts in Europe, including key stakeholders in research, policy and economy;
- · development of the ERC's logo, which has been used to create a recognisable and durable visual identity for the ERC;





• an awareness-raising campaign on the ERC focusing on the 1st Starting Grant call, with over 90 presentations at FP7 and ERC launch events in 23 countries, as well as the dissemination of 5 000 posters announcing the call to research organisations and intermediaries.

The year has seen wide media coverage, especially on the ERC Launch event, with 485 articles published in the period February - August 2007.

The Scientific Council has also been able to benefit from the generous invitations from academies and









- establishment of National Contact Points (ERC NCPs) in more than 36 countries (27 EU Member States, 9 associated countries and some third countries);
- an ERC launch conference on 27/28 February 2007 in Berlin, co-organised by the Deutsche Forschungsgemeinschaft, DFG (German Research Foundation) and the European Commission. The conference was attended by the German Chancellor, Angela Merkel, who declared the ERC 'a milestone in European research policy', the European Commissioner for Science and Research, Janez Potočnik, Angelika Niebler, Chair of ITRE, Committee on Industry, Research and Energy of the European Parliament and researchers, as well as stakeholders from over 30 countries;



learned societies in Member States to provide venues for its plenary meetings. Scientific Council members have thereby had the opportunity to meet in a number of different countries and research institutions and to organise seminars and presentations addressing the local research communities.

The Scientific Council has met 8 times during 2007 to develop and formulate the scientific strategy. The Secretary-General and representatives of the DIS have also participated in these meetings, thereby developing a good working relationship and an appreciation and understanding of the objectives to be met in developing the implementation strategies.

The ERC Board set up by the Scientific Council met 10 times during the year to plan the Scientific Council meetings and liaise with the DIS.

# Monitoring and assessment of the ERC's impact

The Scientific Council has the additional role of overseeing and ensuring the scientific management, monitoring and quality control of the programme implementation. It is establishing an appropriate monitoring, assessment and evaluation framework to provide relevant information for future strategy development, ongoing feed-back on effectiveness of processes and the outcome of decision-making, as well as longer term evaluation.

This exercise draws on good practice and experience from evaluation activities of national research systems,

international research institutions' activities (e.g. the NSF merit review process) as well as the experience of the EU framework programmes and other existing studies<sup>(3)</sup>. It has also consulted leading specialists in fields relevant to evaluation and assessment of frontier research from the EU and North America.

Nevertheless, the ERC is a novel and unique entity at EU level which needs to develop a reflexive understanding of its own practices and operations as well as of the wider impact it has already started to have. The ways in which the ERC is stimulating research activities and how this is contributing to EU competitiveness will be monitored very closely by many stakeholders.

The challenge for the ERC is to set up an appropriate evaluation and assessment framework that is robust and flexible, to enable the Scientific Council to take necessary measures for optimising its short-term scientific strategy and to develop the evidence base needed for rigorous appraisal of the ERC's activities in the longer term.

A call for proposals was launched in November 2007 with the aim of generating a portfolio of projects, studies and associated initiatives that will contribute to the monitoring, assessment and evaluation of the impact of the ERC and the Ideas Programme. These ERC Coordination and Support Actions will prepare the ground for collecting appropriate evidence to demonstrate to the European Commission, Council of Ministers and European Parliament the impact the ERC is having on scientists, universities and research institutions, national research structures and policies, and the European Research Area.

(3) See e.g. Frontier Research: The European Challenge, High-Level Expert Group Report, February 2005, EUR 21619, European Commission

# 2. LAUNCHING **ERC ACTIVITIES**

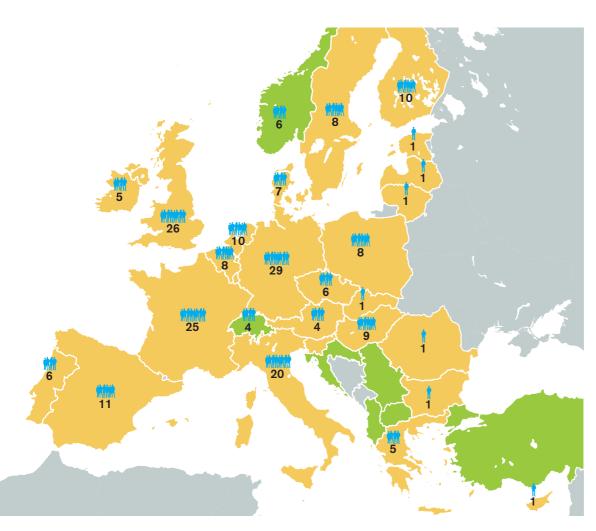
The Scientific Council agreed at the outset that the sole criterion for success in the ERC grant schemes would be the excellence of the research proposal and principal investigator. For such an approach, it is of critical importance that the evaluation process has the credibility and the competence to deliver such outcomes.

## The ERC peer review evaluation process

Setting up the ERC peer review system was a major priority for the Scientific Council during 2007. Working closely with the DIS, the challenge was to establish in a relatively short period of time the overall principles and to ensure that the operational procedures were put in place for the ERC Starting Grant Call.

The Scientific Council took the view that peer review Panels covering all scientific domains - Social Sciences and Humanities (SH), Life Sciences (LS) and Physical Sciences and Engineering (PE) - should be established, with each Panel covering a broad range of topics, to ensure that proper consideration would be given to high quality, interdisciplinary proposals. Twenty panels were set-up for the Starting Grant (Annex 2) and the panel structure has been fine-tuned in light of the response to the first call, such that there will be 25 panels for the Advanced Grant, thus ensuring optimal coverage of future proposals.

The enthusiastic response from the scientific community to the first ERC Starting Grant call in itself presented further challenges - from the logistics of handling the very large number of proposals submitted, to seeking additional reviewers to ensure that the evaluation process could respect the timetable established.

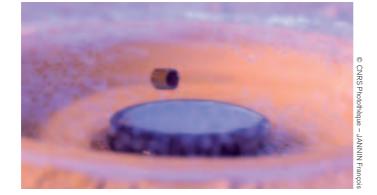


#### Starting Grant peer review: panel members

Starting grant panel members are highly international; their residence is distributed across EU Member States, associated countries as well as overseas. The aim is to further increase the number of international panel members and referees.

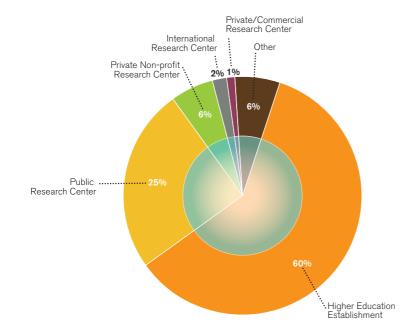






## Peer reviewers: institutional background

ERC panel members come from various types of organisations, bringing a breadth of scientific expertise.



Key to the process was the selection of Panel Chairs and members that include scientists, engineers and scholars of the highest international reputation from both within the EU and beyond. The Scientific Council has been encouraged by the enthusiasm and support amongst the EU and international research community in this task. It is confident that the quality and status of the peer review evaluation panels for the ERC schemes will be a major factor in contributing to the overall objectives of the ERC, as well as providing a benchmark for national funding agencies.

Typically, an ERC panel for a particular review session consists of a chairperson plus 10-12 other panel members. A pool of further referees, working remotely, are available to assist panels for the 2nd stage of the evaluation where a more specialist knowledge may be required and to ensure that all proposals are reviewed by a minimum of 3 experts. The selection of scientific proposals by scientific merit is based solely on the peer review process.

In the spirit of a 'learning organisation' and striving for excellence in all its activities, the ERC will continuously and thoroughly review the peer review evaluation process and will adapt and modify procedures based on the lessons learnt to maintain the highest standards of operation.



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### The 2007 ERC Starting Grant call

The first Starting Grant call was published in December 2006 with a deadline in April 2007. The budget announced for the call was approximately € 290 million, with grants in the range of  $\in$  100 000 and  $\in$  400 000 per year depending on the discipline, for a period of up to five years. A total of 9167 proposals were received of which 8 794 were peer reviewed.

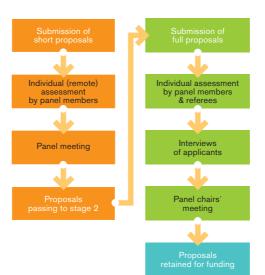
The peer review panels evaluated the proposals in two stages.

Proposals were first assessed remotely between May and June 2007 by more than 220 panel members and 800 additional panel evaluators selected by the Scientific Council in response to the very high number of applications. Panel meetings based on these inputs then took place in June and July 2007.

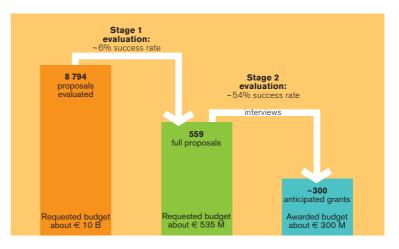
At the end of the first stage, 559 successful applicants (6%) were invited to submit a more detailed proposal for the second stage evaluation by the deadline of 17 September.

During September and October, the remote individual assessments were carried out by panel members and referees of the 554 full proposals submitted by the deadline. Proposals were assessed by an average of five experts. The remote evaluation was followed by an interview where the applicant presented his/her proposal and was questioned by the respective panel. Panel meetings during October and November 2007 considered both the individual assessments and the results of interviews. The outcome of the evaluation process was a list ranking the proposals according to the conclusions of the panels. With applications averaging  $\sim \in 1$  million it is expected that about 300 proposals will finally be funded.

**ERC Starting Grants:** submission, evaluation and selection



#### **ERC Starting Grants:** two stage evaluation process



# **3.** OUTCOME OF THE 2007 ERC STARTING GRANT CALL

Europe's research community responded to the first call for proposals with huge enthusiasm, endorsing the ERC's strategy that such a grant scheme was needed, in view of the limited available funding opportunities for this crucial stage in the careers of young researchers.

The high response rate is a clear signal of the expectations and interest in the ERC by Europe's young scientists and a measure of the need for grants of this kind in Europe. It is hoped that by introducing appropriate measures to manage demand, the ERC can improve the success rates of its schemes over subsequent years.

The ERC President noted that:

"...considering that merely 559 of the impressive number of proposals have been invited to the second stage, it is inevitable that many good candidates will be disappointed not to go through...'

However, the ERC understands and welcomes the fact that a number of national councils and research agencies are considering making funds available to those ERC applicants who were not successful on this occasion.

#### Preliminary statistics and analysis

The diversity of the applications as regards for example the thematic area, scientific objectives, the nationality of principal investigators and the number of host institutions not only demonstrate the broad appeal of the ERC but also provide some highly pertinent information on the breadth of talent in Europe and the aspirations of researchers and host institutions.

Whilst it is risky to draw any major conclusions or key messages from the data from the first Starting Grant call, there are none the less some interesting, preliminary analyses (based on the 300 proposals likely to be funded) that give some initial indications of research activity in Europe. These data can contribute to the longitudinal assessment and evaluation of the direct and indirect impacts of the ERC.

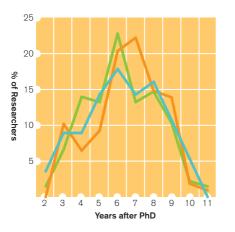
### Grantees' profile

The researchers applying needed to have completed their doctoral studies recently (2-9 years ago) and be at the point to make the transition to independent research leaders in their own right. 87% have four to nine years of experience after completion of their PhD, and their average age is just less than 36 years.

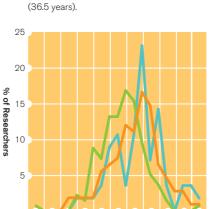
Gender distribution differs largely between the various domains, with a considerably higher number of women selected in the area of Social Sciences and Humanities (48%), as opposed to the domains Life Sciences (20%) and Physical Sciences Engineering (21%).

#### Grantees' profile: years after PhD and domain

The greatest number of principal investigators completed their PhD studies between 5 to 8 years before applying for a starting grant, irrespective of the domain.



Source: Top 300 proposals



24 26 28 30 32 34 36 38 40 42 44

Age

Grantees' profile: age and domain

The average age of the principal investigators

varies across the domains: Physical Sciences

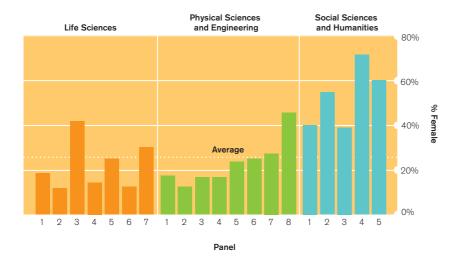
and Engineering (34.5 years); Life Sciences (36 years); Social Sciences and Humanities

Life Sciences

Physical Sciences and Engineering

Social Sciences and Humanities

Source: Top 300 proposals

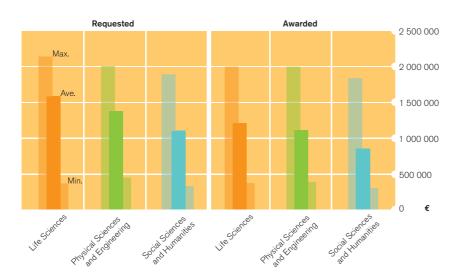


#### Proportion of female grantees by domain

The percentage of women principal investigators amongst successful applicants depends on the domain but also on specific panel subjects, with some marked differences e.g. PE8: 'Earth system science' has significantly higher female proportion than PE2: 'Fundamental constituents of matter'. Note: See annex 2 for the description

of the panels

Source: Top 300 proposals



#### Requested and awarded project budgets: maximum, average and minimum amounts

Project budgets range from  $\in$  300 000 up to a max of  $\in$  2 million; this is largely independent of the domain.

Source: Top 300 proposals

## Research areas or disciplines

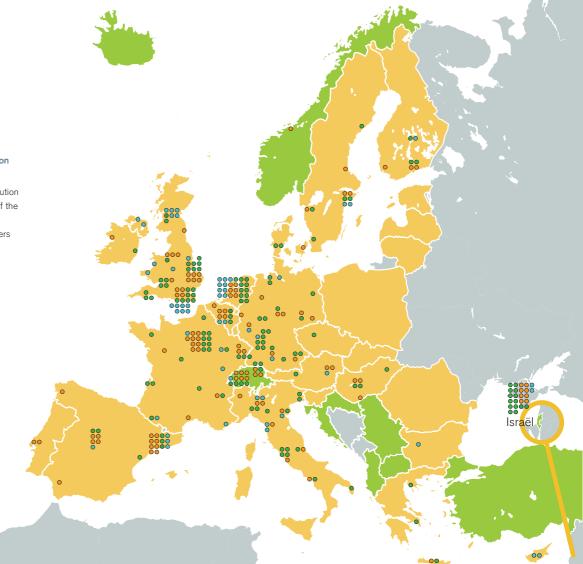
The ERC made no pre-determination of research areas or disciplines in advance and in fact a significant proportion of the proposals submitted were highly interdisciplinary. However, classifying the proposals broadly according to their main scientific focus, the breakdown of the top 300 proposals is approximately as follows:

- Life Sciences including medicine: 36%
- Physical Sciences and Engineering: 45%
- Social Sciences and Humanities: 19%

#### **Geographical distribution** of grantees by domain

The geographical distribution of the host institutions of the principal investigators suggests potential clusters of excellence in Europe.

- Life Sciences
- Physical Sciences and Engineering
- Social Sciences and Humanities
- A dot indicates a successful application in one of the three domains.

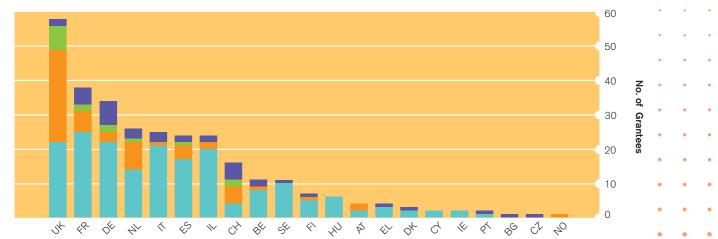


Source: Top 300 proposals

## Grantees' location and mobility

The ERC grants are open to applicants of any nationality, as long as their host institution is based in the EU or in an associated country. The ERC Starting Grants attracted researchers currently based outside Europe. The map in Annex 3 highlights the worldwide applications.

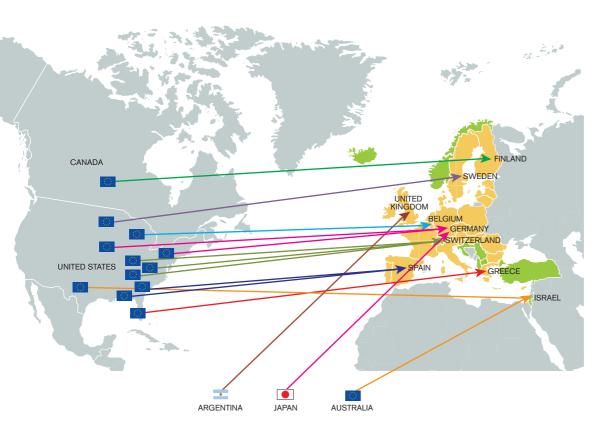
However, only a relatively small number of these applications were finally successful. Of the top 300 researchers likely to be funded, 5% are not currently living in Europe. Regarding host institutions, the majority of them (86%) are located in the EU with the remaining 14% situated in an associated country.



#### Staying and incoming grantees

- Relocation
- Staying: Extra-EU/AC
- Staying: Intra-EU/AC
- Staying: Own country
- In the first Starting Grant Competition most successful principal investigators are staying at their current research institutions, independent of their origin.

Source: Top 300 proposals



#### **Repatriation and** recruitment to Europe

The Starting Grant call gave a possibility for researchers to relocate to Europe. However, only a number of such proposals were successful and the ERC will continue to promote its grant schemes outside Europe.

Note: colours of the arrows indicate the host country

Source: Top 300 proposals

# **4.** DEVELOPING THE ERC GRANT MANAGEMENT SYSTEM

During 2007, a substantial effort was made to design and implement means for the DIS to manage efficiently and effectively the ERC grants, and to do so in a transparent and accountable way, building on existing good practice and simplifying practices where appropriate.

With the benefit of a rigorous peer review system, once a proposal is selected for funding, the Scientific Council foresees that the principal investigators awarded the grant should be able to carry out their work with minimal interference, and the host institutions should make special efforts to provide the grantees with supportive academic facilities and surroundings. Of course, it is understood that the principal investigators should act responsibly in their use of public funding.

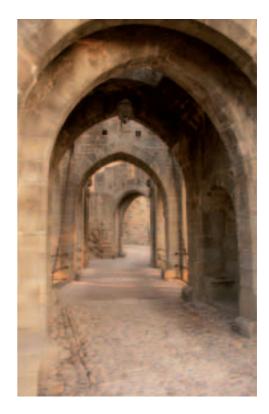
Indeed, ERC grants require the scientific independence of grantees to be guaranteed by host institutions. This relationship and the responsibilities it entails are detailed in a supplementary agreement between the principal investigator and host institution, which includes a 'portability clause', as it is recognised that there could be circumstances when a principal investigator needs to change institution for the benefit of his/her research and/or career progression.

ERC grants will be subject to both scientific and financial monitoring over the lifetime of the project. Reporting on the scientific progress of the project is the responsibility of the principal investigator, but the host institution is expected to handle the preparation and submission of financial management reports.

The separation between the scientific and financial aspects requires appropriate mechanisms to ensure these two paths exchange adequate information to ensure both progress in scientific objectives, as well as adherence to the financial regulations applying to the management of public funds under the EU budget.

To keep the administration requirements for the principal investigator to a minimum, in most cases only a mid-term scientific report is foreseen. Reporting on financial aspects and the use of resources will be more frequent, with the host institution submitting the relevant information at the end of each financial management reporting period. Financial aspects will be handled by an operations team in the DIS, set-up as the single point of contact for all financial administration needs, both those internal to the Executive Agency, and external, including those from experts, principal investigators and host institutions. The timely absorption of funds within the project will be monitored as an indicator of financial management and of the vigour of scientific undertaking.

These arrangements are expected to improve the quality and flexibility of project management. Project payments will not be conditional on deliverables but on the effort and use of resources (funding) for the project, and the efficient and timely flow of funds to the project will be assured in all normal cases in parallel with the handling of scientific issues. Processes are also being set up with the aim of improving the flow of information between the various parties and DIS, using electronic means wherever possible (unless original documentation and signatures are required by EC regulations).



# 5. STEPS TOWARDS ESTABLISHING THE ERC EXECUTIVE AGENCY

In October 2006 the Commission created a new Directorate in DG Research – Implementation of the 'Ideas' Programme – whose mission is to establish the ERC Executive Agency and implement the Ideas Programme until the Executive Agency is in place and fully operational.

The Directorate comprises of the Director's office and 4 units:

- S1: Strategic matters and relations with the Scientific Council
- S2: Management of the 'Ideas' programme
- S3: Logistical support for the European Research Council
- S4: Administration and finance

The main activities in 2007 have been providing support to the Scientific Council, ensuring the communication with the scientific community, implementing the first call of the ERC Starting Grants and preparing the first call for the ERC Advanced Grants. It has also launched the process for the establishment of the ERC Executive Agency.

The offices are currently located in Madou Tower, Madou Place, Brussels.

Staff includes Commission officials, temporary and contract agents and experts seconded from similar national organisations.

During 2007, the human resources in DIS increased from 66 staff members that were in post on 1st January to 108 by 31st December 2007. The 42 staff members recruited during the year brought a range of experience and career profiles to the DIS and included 13 seconded national experts whose presence helps to ensure that the DIS remains close to the research communities throughout Europe.

#### Staff profile over time

The number of staff employed by the ERC Executive Agency will increase significantly over time to 389 persons in 2013.

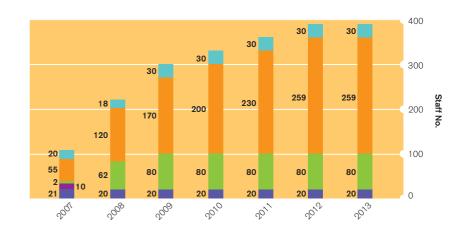
- Commission Officials (AD)
- Commission Officials (AST)
- Temporary Agents
- Contract Agents
- Seconded National Experts

# Setting up the ERC Executive Agency

During 2007, the Commission has made significant progress towards establishing the ERC Executive Agency. The process and rationale for using this structure for the ERC is outlined below. The creation of the Executive Agency includes consultation with Commission services and the other Community institutions. On the 14th November 2007, the Member States' Regulatory Committee on Executive Agencies gave a positive opinion on the draft proposal. This was followed by a positive vote by the Budgetary Committee of the European Parliament on the 27th November. As a consequence, the formal Decision of the Commission on setting up of the ERC Executive Agency was taken on the 14th December 2007.

The mission of the Executive Agency will be twofold:

- to implement the Ideas programme;
- to support the Scientific Council in the accomplishment of its tasks.



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A further Decision by the Commission that delegates the tasks to the Executive Agency will be presented by DG RTD in early 2008.

## The Executive Agency as a legal structure for the ERC

### What is an executive agency?

Executive agencies are Community bodies with a public Service role with legal personality and with administrative autonomy, to which the Commission delegates the management of Community programmes.

## Why is it appropriate for the ERC?

The European Parliament and Council of Ministers decided that the ERC should be autonomous and have a dedicated implementation structure. An executive agency is a structure that can handle all of the tasks of programme execution, and it will provide savings to the Community budget as the administrative costs of the ERC Executive Agency are foreseen to be 3,5% of the budget for the Ideas programme.

#### Which were the other options?

The other alternative considered was a structure established under Article 171 of the Treaty, which provides for the set up of structures necessary for the efficient execution of Community research programmes. The absence of precedents implied lengthy and practically difficult negotiations.



# 6. FORWARD LOOK TO KEY ACTIVITIES FOR 2008

## Developing strategic positions

Key to the future success of the ERC will be to ensure that raising the quality of science in Europe remains the core focus of its strategy and activities.

A positive and supportive relationship between the ERC and funding agencies at national level will contribute to the dynamism of the European research system. The ERC will take a lead in furthering the exchange of ideas with the key stakeholders during 2008, to ensure that activities and schemes are developed in the most effective way for mutual benefit. As regards to the wider international domain, in 2008 the ERC will broaden its engagement to encompass other developed and emerging knowledge economies (Australasia, Japan, China, India, Brazil...).

In implementing the Ideas Programme according to carefully designed procedures, the ERC aims to promote major structural reforms to improve the quality and efficiency of European research. Europe has to develop innovative human resource management strategies to address the projected shortfall in the number of researchers and to ensure a sustainable and competitive knowledge base. The Scientific Council will contribute to creating conditions that make Europe a more attractive place to work and opening the European Research Area to the world.

### Further development of the ERC

Both in implementing the FP7 Ideas Specific Programme as well as setting up an autonomous, entity, there is a need for a strong and effective collaboration between the independent Scientific Council, the DIS and the Commission.

This partnership has been critical during the set-up phase of the ERC activities during 2007 and the implementation of the programme has been achieved due to the dedicated, professional commitment of the staff in the implementation structure as well as the continuous cooperation and support from the Commission and colleagues in the Directorate General for Research.

Structures, mechanisms and governance will continue to evolve during 2008, presenting a dynamic and challenging environment for the ERC as it continues on its trajectory to administrative autonomy. These experiences will need to be analysed in preparation for the mid-term review of the Ideas programme and Seventh Framework programme.

During 2008, the Commission will present to the European Parliament and the Council a Communication on the methodology and terms of reference to be used for the review to be carried out by independent experts by 2010. This review will assess the ERC's





structures and mechanisms against the criteria of scientific excellence, autonomy, efficiency and transparency. It will explicitly look at the advantages and disadvantages of a structure based on an executive agency, with the alternative structure based on Article 171 of the Treaty or potentially other options. On the basis of this review, the ERC's structures and mechanisms should be modified as appropriate following a Commission proposal.

This will be a challenging exercise, particularly as the ERC will, at the same time, be testing and refining its operations and procedures. However, the ERC is committed to be a 'learning organisation', developing and adapting its structures and mechanisms to ensure it delivers its objectives in an efficient and effective manner. It is already foreseen that action will be taken in 2008 to improve operations, including the management of the peer review process.

Assessment has a high priority and is an integrated part of the ERC and its processes. The ERC will use existing tools as well as develop new tools and quantitative and qualitative approaches to review its activities. During 2008, the ERC will continue to develop its data-sets and commence longitudinal studies and systematic data collection to allow a factdriven, evidence-based evaluation of activities – both of the ERC (Scientific Council and Dedicated Implementation Structure) activities and the activities of the researchers funded by the ERC.

# Communicating to the research community and wider public

Communication is and will be a core challenge – to assure a high reputation and positive image of the ERC in and outside of Europe, which to a large extent will be founded in the quality of its operations and methodologies, and in the longer-term on the impact of its strategy.

From 2008 onwards, as ERC-funded frontier research projects will be starting, the ERC will showcase successful principal investigators and projects, which will serve as benchmarks and case studies for 'excellence', allowing comparison and raising the aspirations of potential applicants.

The ERC will continue to develop and maintain good relations and communication with the main political actors and stakeholder organisations, in order to establish and position itself as a partner in the research funding landscape.

The ERC has already participated in some major exhibitions in 2008:

- European Career Fair 2008, MIT, Boston, 2-4 February;
- AAAS2008, Boston, 14-18 February;
- International Career Fair, San Francisco, 29 February – 1st March;

and the ERC will be represented at the following exhibitions later in 2008:

- Salon européen de la Recherche et de l'Innovation, 5-7 June;
- ESOF2008 EuroScience Open Forum, Barcelona, 18-22 July.

Other ERC events foreseen for autumn 2008 include:

- ERC event organised by the French EU Presidency, Paris, 7 October;
- ERC Open Day Inauguration of the ERC Executive Agency, Brussels.

# Implementing and managing grants

During 2008, the DIS will face a series of highly demanding operational tasks. In the first place, it will finalise the grant agreements arising from the first Starting Grant call for proposals. Systems and procedures developed and established for user-friendly and simple grant administration will be tested by the first tranche of Starting Grant awardees.

The first Advanced Grant call for proposals was launched in November 2007, with deadlines from February 2008 to April 2008. The reception of proposals and management of the peer review process will test further the ERC's operations.

In addition, the ERC will prepare a new work programme for 2009 activities and will launch the second Starting Grant call for proposals with deadlines in late 2008.

Throughout these operations, the ERC will strive to optimise its methods and processes and to ensure that researchers are empowered to conduct their research without undue administrative interference.

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# **ANNEX 1** MEMBERS OF THE ERC SCIENTIFIC COUNCIL

Prof Fotis Kafatos (FL) Chairman Immunogenetics Chair, Imperial College London

Dr. Daniel Estève (FR) Vice-Chair Research Director, CEA Saclay

Prof. Helga Nowotny (AT) Vice-Chair Vienna Science and Technology Fund Professor em. of Social Studies of Science, ETH Zürich

Dr. Claudio Bordignon (IT) Professor of Hematology Università Vita-Salute San Raffaele, Milan

Prof. Manuel Castells (ES) Research Professor, Open University of Catalonia Professor em., University of California, Berkeley

Prof. Paul J. Crutzen (NL) Director emeritus, Max Planck Institute for Chemistry, Mainz Professor, Scripps Institution of Oceanography, San Diego

Prof. Mathias Dewatripont (BE) Professor of Economics, ECARES Université Libre de Bruxelles

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

Prof. Hans-Joachim Freund (DE) Director, Fritz-Haber-Institute, Max Planck Society, Dept. of Chemical Physics, Berlin

Prof. Wendy Hall CBE (UK) Professor of Computer Science, Southampton University

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

Prof. Michal Kleiber (PL) President, Polish Academy of Sciences President, European Materials Forum

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

Prof. Maria Teresa Lago (PT) Full Professor, School of Sciences, Porto University Member of Council of the European Southern Observatory, ESO Member of Academia Europea

Dr. Oscar Marín (ES) Group leader, Instituto de Neurociencias de Alicante, CSIC-UMH

Prof. Lord May of Oxford, OM AC (UK) Dept. of Zoology, Oxford University President, The Royal Society 2000-2005

Prof. Christiane Nüsslein-Volhard (DE) Director, Max-Planck-Institute for Developmental Biology, Tübingen

Dr. Leena Peltonen-Palotie (FI) Head of Human Genetics, Wellcome Trust Sanger Institute, Cambridge UK Professor, Institute of Molecular Medicine Finland

Prof. Alain Peyraube (FR) Directeur de Recherche, CNRS Professor, Ecole des Hautes Etudes en Sciences Sociales, Paris

### Dr. Jens Rostrup-Nielsen (DK)

Director Special Projects, Haldor Topsoe A/S Adjunct Professor and Board Member Technical University of Denmark

Prof. Salvatore Settis (IT) Director and Professor of the History of Classical Art and Archaeology, Scuola Normale Superiore, Pisa

Prof. Rolf Zinkernagel (CH) Head, Institute of Experimental Immunology, Zürich University, University Hospital, Zürich

# ANNEX 2 ERC STARTING GRANT: PANEL STRUCTURE AND CHAIRS

### Social Sciences and Humanities

SH1 Individuals and organisations: Prof. Torsten Persson

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- SH2 Institutions, behaviour, values and beliefs: Prof. Guido Martinotti
- SH3 The human mind and its complexity: Prof. Gretty Mirdal
- SH4 Cultures and cultural diversity: Prof. Glenn Most
- SH5 The study of the past and of cultural artefacts: Prof. Jacques Revel

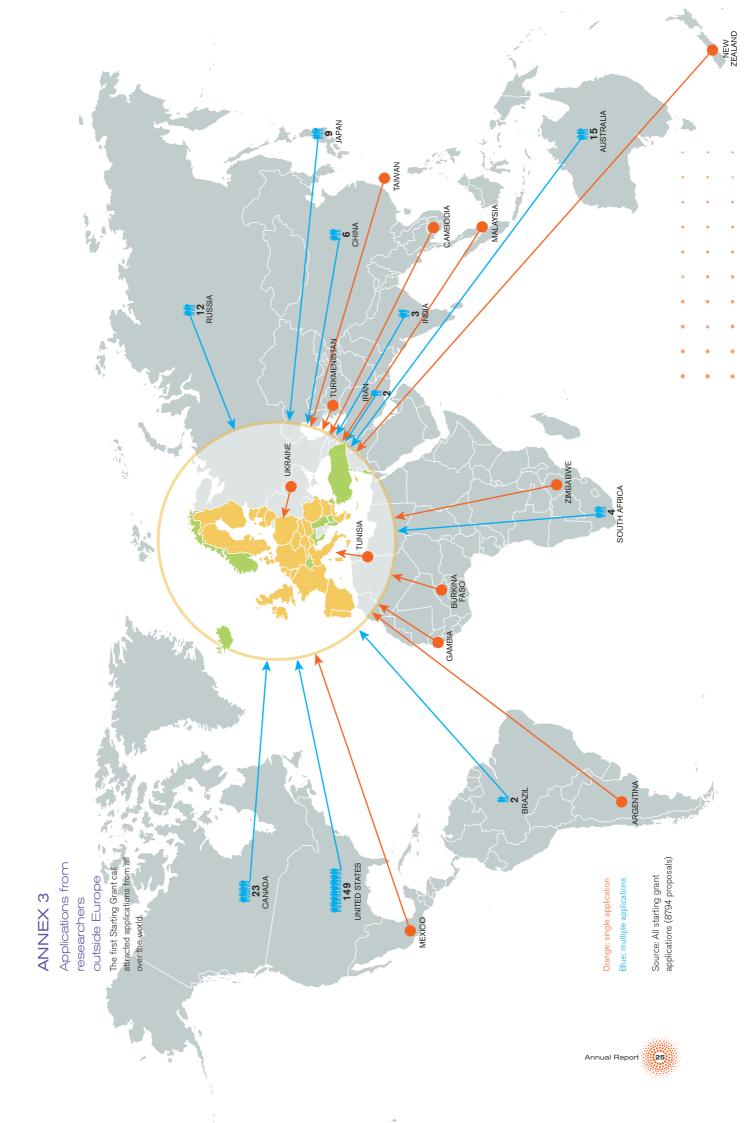
## Mathematics, physical sciences, information and communication, engineering, universe and earth sciences

- PE1 Mathematical foundations: Prof. Jean-Pierre Bourguignon
- PE2 Fundamental constituents of matter: Prof. Massimo Inguscio
- PE3 Condensed matter in physics and chemistry: Prof. Robert Blinc
- PE4 Material and chemical sciences: Prof. Robert Schlögl
- PE5 Information and communication: Prof. Keith Van Rijsbergen
- PE6 Engineering sciences: Prof. Erkki Leppävuori
- PE7 Universe science: Prof. Catherine Cesarsky
- PE8 Earth system science: Prof. Katherine Richardson

#### Life Sciences

- LS1 Molecular, cellular and developmental biology: Prof. Susan Gasser
- LS2 Genetics, genomics, bioinformatics and systems biology: Prof. Janet Thornton
- LS3 Organismic physiology, including infection and immunity: Prof. Carlos Martínez
- LS4 Neurosciences: Prof. Anders Björklund
- LS5 Evolutionary, population and environmental biology: Prof. Ilkka Hanski
- LS6 Medical and health science research: Prof. Giulio Cossu
- LS7 Applied life sciences, biotechnology and bioengineering: Prof. Lars Walloe

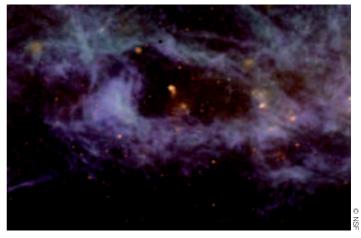
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# GLOSSARY

•		•		
			AC	Associated and Candidate Countries
•	•	•	EC	European Commission
			ERA	European Research Area
•	•	•	DIS	Dedicated Implementation Structure
•	•	•	ERCEA	ERC Executive Agency
			EU	European Union
•	•	•	FP 7	7th Research Framework Programme
•	•	•	ITRE	Committee on Industry, Research and Energy of the European Parliament
			LS	Life Sciences
•	•	•	NCP	National Contact Point
		•	NSF	National Science Foundation
		•	PE	Physical Sciences and Engineering
•	•	•	PI	Principal Investigator
_			SH	Social Sciences and Humanities
	•	•		







The host institutions of ERC grantees 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
- Germany
- France
- Italy
- Luxembourg
- The Netherlands
- Denmark
- United Kingdom
- Ireland
- Greece
- Portugal
- Spain
- Austria
- Finland
- Sweden
- Czech Republic
- Estonia
- Cyprus
- Latvia
- Lithuania
- Hungary
- Malta
- Poland
- Slovenia
- Slovak Republic
- Bulgaria
- Romania

## ASSOCIATED AND CANDIDATE COUNTRIES

- Switzerland
- Israel
- Norway
- Iceland
- Liechtenstein
- Turkey
- Croatia
- Serbia
- Former Yugoslav Republic of Macedonia

European Commission

# EUR 23185 – Annual Report on the ERC activities and achievements in 2007, prepared under the authority of the ERC Scientific Council

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On the 2nd of February 2007 the new European Research Council (ERC) officially came into existence. This is the first annual report on the ERC prepared under the authority of the ERC Scientific Council, summarising the outcome of an exciting and challenging year.

2007 saw the set-up of the ERC's management structure, linking the Scientific Council and the Dedicated Implementation Structure and assuring efficient implementation and operation. The ERC's scientific strategy was defined and a first 'Starting Grant' call successfully launched, along with preparations for the first 'Advanced Grant' call in 2008. Preliminary work resulted in a Commission decision in December 2007 on the establishment of the ERC Executive Agency.



