



ERC: The First Steps

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President, ERC

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ERC is a Major European Initiative: A Visionary Idea Whose Time Has Come

- **A logical development of the European Research Area**
- **Securely anchored in EU legislation**
but at the same time.....
- **A revolutionary development**



Does Europe Need Frontier Research?

- **Yes, an essential part of our civilization**
Galileo, Newton, Darwin, Freud
Einstein, Watson & Crick, Jacob & Monod... and?
- **Contribution of frontier research to innovation**
One of the essential drivers of innovation, but needs:
 - *well established intellectual property rules*
 - *new findings to be brought fast to R&D*
 - *flow of researchers between academia & industry*



Europe Can Only Compete Through Knowledge

European Research Council



- **Leadership in Science, the Endless frontier**
- **Central Role in the Knowledge Triangle:
Education / Research / Innovation**
- **Investment in excellent frontier research is an imperative, not an option**



To Become More Competitive, Europe Must



- **Generate, Attract and Retain Top Talent**
- **Integrate and Internationalize our Efforts**
- **Encourage and Trust the Young**
- **Create Attractive Career Paths**
- **A Competitive Champions League,
that sets standards
by merit only (as in football)**



The Roadmap to the ERC-1

Should Europe Invest in Fundamental Research?

- **Mobilization of Life Sciences Research Communities:**
EMBO, EMBL, FEBS
- **Mobilization of other Communities:**
Royal Academy Stockholm Meeting (invitation only)
- **Political Context: P. Busquin & ERA**



The Roadmap to the ERC-2

- **J. M. Gago & Lisbon: Science Ministers, Nobelists, Heads of European Intergovernmental Institutions**
- **Copenhagen Meeting (EU Presidency)**
- **High Level Groups (F. Mayor, R. Sykes)**

Do We Need a European Research Council?

Surprising Unanimity: YES!



Birth and Structure of the ERC

- **P. Busquin, A. Mitsos, J. Potočnik embrace ERC**
- **Debate: via EC or via Article 171?**
- **Scientific Council independently nominated**
- **Excellent collaboration at start-up phase**
- **Commission guarantees ERC autonomy & integrated operation**
- **ScC organizes and proposes:**
 - ERC Board, Secretary General**
- **Commissioner Potočnik delivers on ERC structure and budget (€7.16 b / 7 years)**



ERC Scientific Council: Aim, Responsibilities and Actions

- **Guide development of the ERC, ensure successful structure**
- **Cooperate with EC to ensure proper functioning:
consistent with ScC's strategy and programme**
- **Modify strategy and programme in light of ERC experience**
- **Partner with DIS, soon (?) Executive Agency**
- **Intensive 1 year effort to prepare ERC in time
(maintain trust and momentum)**



The ERC Strategy



- **Address essentials, obvious gaps in Europe**
 - *Opportunities and independence for young scientists*
 - *Individual frontier research programs*
 - *Significant funding to make a difference*
- **Keep it simple**
 - *All fields of science and scholarship are eligible*
 - *Excellence is the sole criterion*
 - *Research results are the only deliverable*
 - *Referees & Evaluation Panels selected by excellence*
 - *Flat 20% contribution to overheads*



The ERC Strategy



- **Keep it flexible**
 - *Evaluation panels judge investment levels*
 - *Researchers can rebudget*
 - *Grants are portable*
- **Trust the dynamic of science**
 - *Interdisciplinarity is encouraged*
 - *Excellence attracts excellence*
 - *The effects of critical mass*
 - *From individual to institutional excellence*



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What's New

- [ERC Statement on 2007 Starting Grant Competition: State of Evaluation](#)
- (22/06/2007)
- [ERC Statement on the 2007 Starting Grant](#)
- 04/06/2007
- [ERC Starting Grant panel members](#)
- 26/04/2007 -
- [ERC Policy on PhD and Equivalent Degrees](#)
- 30/03/2007 -
- [ERC launch conference - Berlin](#)
- 27-28/02/2007 -

HIGHLIGHTS

2007 Starting Grant competition: State of Evaluation, 22 June 2007

To ensure an evaluation and selection process resulting in an efficient, fair and equal treatment of every proposal, the Scientific Council implemented an emergency plan that had been kept in reserve, and invited an additional 600 Panel Evaluators to support the 244 members of the 20 ERC Panels in the peer review evaluation process. [Read more](#)

Message from the President of the European Research Council



The creation of the European Research Council (ERC) by the common action of the political institutions of the European Union (the Commission, the Parliament and the Council of Ministers) 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.

We are committed to establish the ERC as an outstanding research funding agency that attracts the very best researchers, beginning in 2007 with those who are embarking on or consolidating their independent careers. ... [read more](#)

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



ERC Starting Independent Researcher Grant (ERC Starting Grant)

- *Ca. 300 M€; 200 grants, average 1.5M€ for 5 years*
- *i.e. 200 new investigators per call, ca. 1400 in 7 years*

Sole selection criterion: Excellence of person & proposal

- **Eligibility:**
 - *≤ 9 years since Doctorate + 3 years for service*
 - *Recently established or offered a position*
 - *To work within EU or Associated States*
 - *No nationality criterion*

3 Rs: Recruit, Repatriate, Retain TOP TALENT



ERC Advanced Investigator Grant (ERC Advanced Grant)

European Research Council



- *Annual budget minus ERC Starting Grants*
- *From ca. 600 M€ to over 1 billion € / year*
- *ca. 200/500 grants (up to 2.5M€ each) awarded each year*
- **Sole selection criterion: Excellence of proposal & track record**
- **Eligibility:** (a) *established investigators at all career stages*
(b) *located or moving to Europe*
(c) *no age limit or nationality criterion*
(d) ***The 3 Rs***



Calls for applications

- Starting Grants

First call: December 2006

Submission deadline: 25 April 2007

Stage 1 results: July-August 2007

Stage 2 results: December 2007 - January 2008

- Advanced Grants

First call: Early 2008

Starting and Advanced Grants

At least one call per year, from 2008



Starting Grants: Foster Early Independence of Young Investigators

Principal Investigators (PI's): Outstanding young scientists

*European and non-European
Working or moving to Europe*

Host institutions:

- **Universities**
- **Research Organizations**
(including companies, that allow independent research)
Based in a European Member State or Associated Country



ERC Advanced Grants - Objectives

- **Support individual teams led by leading established Principal Investigators including, for example:**
 - **Top researchers in European Universities**
 - **New top quality recruitments**
 - *From European Overseas Diaspora*
 - *Non-European recruitments*
- **Finance ground-breaking, high-risk research that opens new directions in the PIs' research domains including those of a multi- and inter-disciplinary nature.**
- **Provide flexible to manage research funds**



ERC Grants: What is expected by the researcher?

- **Make proposal of exceptional quality**
- **Commit best efforts to research programme**
- **Diligent handling of financial and other resources**
- **Fulfil reporting duties vis-à-vis host and ERC**
- **Commit to scientific integrity**
- **Honour the rules of the host institution**



ERC Grants: What is expected of the Host Institution?

Make special efforts to attract and retain high caliber researchers

Ensure supportive academic surroundings

- *Access to talented graduate students*
- *Provision of appropriate office/lab space*
- *Access to facilities and scientific equipment*
- *Research/teaching balance*
- *Provision of appropriate intellectual support*
- *Access to administrative infrastructure*



ERC Grants: Portability

ERC Grants are portable:

- **“Money follows the researcher”**
- **The PI is entitled to transfer the grant to another institution after a minimum 2 years at the sponsoring institution**
- **Proper justification and ERC approval required**



Challenges and Opportunities for Institutions (and Regions)

- **Talent is the best-distributed resource**
- **Researchers like to work in home country, if adequately supported**
- **Generous ERC grants offer independence, permit flexible new hiring**
- **Hosts ensure independence; fund leaders; offer competitive package**
- **New poles of excellence created by targeted synergistic recruitment**
- **Regions encouraged to reward competitive institutions**
- **Opportunity for structural fund use**



ERC Benefits to Science and Society

- **Open competition between top researchers in Europe enhances aspirations, achievements and recognition**
- **Funds channelled into promising fields bottom-up with agility not always possible for national systems**
- **Europe becomes attractive to talent regardless of nationality**
- **Investment in next generation leaders is stimulated**
- **ERC strategy facilitates rapid investment on new issues confronting society**
- **Creativity is nurtured, helping research-based industries**



1st Call ERC Starting Grant

Massive response

Domain	Number of proposals	% of proposals	% of budget pre-allocated*
Life Sciences	3,396	37,0	40
Physical Sciences & Engineering	4,408	48,1	45
Social Sciences & Humanities	1,363	14,9	15
Total	9,167		

* Indicative budget established by ScC (Work programme 2007)



ERC Starting Grant: Statistics

Some preliminary statistics are available:

- Average requested grant size: 1 M€
- Female/male applicants: 30/70%
- Mostly from single institutions:

No. of Institutions	1	2	3	4	5	6	7	8	9	10	11	12	13	14	17	22
No. of Proposals	8011	578	268	124	74	41	20	20	12	6	3	2	4	1	2	1

- Broad distribution of time for PI after PhD:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005
%	1.7	8.7	13.6	14.6	15.1	15.0	13.6	12.4	4.2



1st Call ERC Starting Grant

Constitution of Individual Teams, “Age” of PI

Proposals mostly involve single institution

- 87% of proposals involve 1 institution
- 7% of proposals involve 2 institutions
- 2% of proposals involve 3 institutions

⇒ The concept of “individual teams” has been well applied.

Time after PhD

- 84% of PIs received PhD between 3 and 8 years ago



1st Call ERC Starting Grant

Geographical distribution of applications

Cluster	PI residence %	Host Institution location %
EEC6: BE, DE, FR, IT, LU, NL	44.8	46.2
Next 9 of EU15: AT, DK, EL, ES, FI, IE, PT, SE, UK	35.5	37.2
Next 12 of EU27: BG, CY, CZ, EE, HU, LT, LV, MT, PL, RO, SI, SK	8.6	8.8
Assoc/cand. states: CH, HR, IL, IS, NO, RS, TR	7.9	7.8
AU, CA, JP, NZ, TW, USA	2.8	0
AL, AR, BR, BF, CN, EG, IN, IR, KH, ME, MX, SN, TN, RU, SG, UA, UZ, ZA, ZW	0.4	0
	100	100



ERC and the ERA: Additional needs

- **Implement fully and properly the ERC according to the established legislation**
 - ✓ **Autonomy not fully realized**
 - ✓ **An ERC-specific Executive Agency is key to success**
- **Extend the principles of autonomous management and governance to other areas**
- **Increase resources**
- **Improve the connections between frontier research and innovation**
- **Assure the free circulation of researchers**
- **Improve efficiency and complementarity of European research schemes and promote synergies with national and other research programs**