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The ERC Project

Conception and Implementation of a European Research Council

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Introduction

- Challenges for Research in Europe
- Why an ERC?
- Major steps in the political process
- Principles, structure and organisation
- Progress in building the ERC

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Challenges for Research in Europe

- **Limited career opportunities**
- **Appealing career opportunities** from third countries (USA, Japan, China) attracting European graduates
- **Public Perception:** Fewer students taking Science subjects
- **Dropping private R&D investment**
- **Fragmentation** of research and funding activities
⇒ **lack of competition**
- **Complex Administration:** not helping to attract and maintain the best researchers

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Why an ERC ?

- Career Development
- Recognition and visibility of excellent research and researchers (attractive & prestigious grants)
- Competition and comparison (European benchmark for excellent research)
- Increase performance and impact (Focus on Frontier Research)

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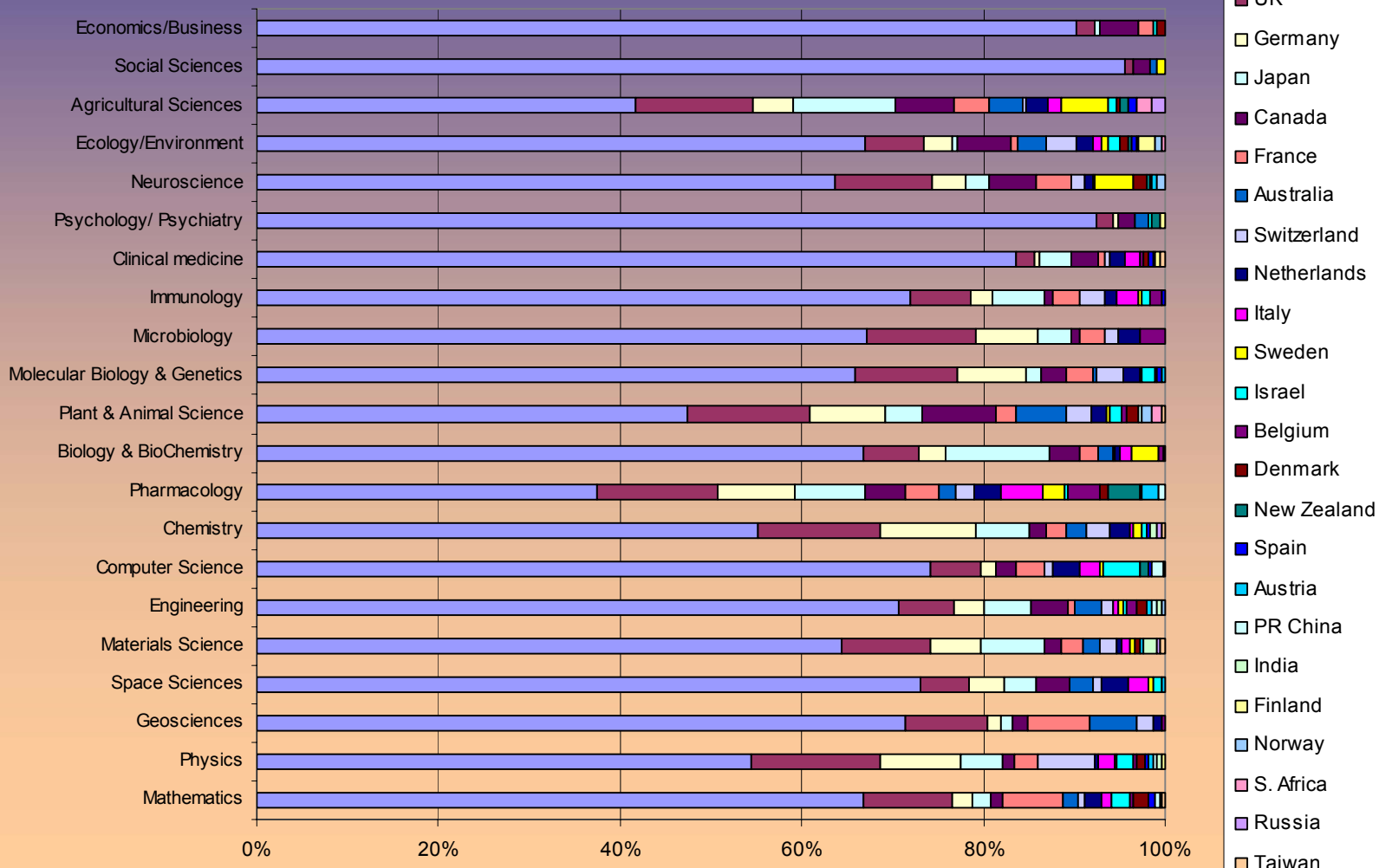
Why an ERC ?

- US scientists dominate in each of the 21 subject areas of science (Source: Basu, 2004)
- 1.93% of Europe's GDP is invested in R&D compared with 2.59% in US and 3.15% in Japan (European Commission, July 2005)
- Duplication of research in Europe due to high number of Research Institutions (UNESCO Science Report, 2005)

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Countrywise distribution of Highly Cited Scientists



Source:
Basu, 2004

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What is Frontier Research ?

- Research at the frontiers is an intrinsically risky venture
- It is characterised by an absence of disciplinary boundaries
- We need to avoid outmoded distinctions:
 - Between “basic” and “applied” research
 - Between “science” and “technology”
 - Between “traditional” disciplines

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Major steps in the political process

- 12/2003: ERC Expert Group (ERCEG) established by Danish EU Presidency argues for creation of an ERC
- 03/2004: European Summit concludes that an EU funding scheme targeting basic research is needed
- 04/2005: European Commission proposes creation of an ERC funded through the 7th EU Framework Programme (Specific Programme "IDEAS")
- 07/2005: Independent Committee proposes 22 renowned scientists as founding members of the ERC Scientific Council
- 10/2005: **ERC Scientific Council meets for the first time**
- Late 2006: The 7th EU Framework Programme to be adopted
- Early 2007: **The first ERC call for proposals to be launched**

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ERC – Guiding Principles

- **Excellence as sole criterion**
- **Investigator-driven frontier research**
- **All areas of research**
- **Individual independent teams**
- **100% reimbursement of projects**

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ERC – Aims and Objectives

- **Reward the best** researchers
- Researchers gain high European and international **visibility**
- **Researchers retained** in Europe
- **Competition improves quality** of research & allows benchmarking
- High quality frontier research will stimulate early-stage **industrial investment** & boost European share in **IP and start-ups**

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ERC - Structure and Organisation

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Independent scientific governance

The Agency

Practical implementation and management of operations

The European Union

Providing the financial means

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The Scientific Council - Members & Role -

- 22 high level scientists reflecting the full scope of European research, nominated by Commission
- Role:
 - Establish overall scientific strategy: annual work programmes (incl. calls for proposals, evaluation criteria); define peer review methodology; ensure selection and accreditation of experts
 - Control quality of operations and management
 - Ensure communication with the scientific community

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The Scientific Council - Structure and Organisation -

- 22 Members of ScC elected the Chair and Vice-Chairs
- Chair: Prof. Fotis Kafatos
- Vice-Chairs: Prof. Helga Nowotny & Dr Daniel Estève
- Secretariat of the ScC
- Regular Plenary Meetings (every 1-2 months)

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The Agency

- Execute annual work programme (established by the Scientific Council)
- Implement calls for proposals and provide information and support to applicants
- Organise peer review evaluation
- Establish and manage grant agreements
- Administer scientific and financial aspects and follow-up of grant agreements

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The European Union (represented by the European Commission)

- Provide financing through the EU framework programmes
- Guarantee independence and integrity of the ERC
- Ensure that implementation follows principles of autonomy
- Adopt annual work programmes as established by the Scientific Council

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**Initial structure
for ERC development**

**European Commission
DG Research**

**Scientific
Council**

**Secretariat of
the Scientific Council**

- Strategy
- Communication
- Evaluation system
and ERC processes
- Grants, Finance
- Resources

ERC political negotiation

Other
responsible
departments

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Progress in building the ERC

- ERC Launch Strategy 2006/2007
- ERC Starting and Advanced Grants
- Who can apply?
 - Individual teams
 - International cooperation
- How to Apply: Applications for Grants & Peer review process
- ERC Budget

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ERC launch strategy 2006/2007

- 2 funding streams operating on bottom-up basis
- Application procedures simplified
- ERC will be flexible to adjust mechanisms and scientific strategies
- ERC will complement (but not duplicate) existing European research initiatives

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Funding Streams

Two streams of activity are foreseen:

- **ERC Starting Independent Researcher Grant scheme (ERC Starting Grant)**
 - Call for proposals to be published in early 2007
- **ERC Advanced Investigator Researcher Grant scheme (ERC Advanced Grant)**
 - Call for proposals at a later stage

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ERC Starting Grant

(ERC Starting Independent Researcher Grant)

- support researchers at the start of their first independent research team
- provide a structure for transition from working under a supervisor to independent research
- supply grants to support the creation of excellent new teams which bring energy and new ideas to their disciplines

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ERC Starting Grant

(ERC Starting Independent Researcher Grant)

- Main aim is the 3Rs:

Retain, Repatriate, Recruit

- ~ €300M (approximately $\frac{1}{3}$ of ERC annual budget)
- ~ 200 Starting Grants per year, each for up to 5 years
- 1400 Starting Grants over 7 years of FP7

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ERC Advanced Grant

(ERC Advanced Investigator Researcher Grant scheme)

- designed to support excellent investigator-initiated research projects by established investigators
- should complement the ERC Starting Grant scheme by targeting researchers who have already established their independence as team leaders

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Who can apply ? → Individual Teams

- The Team Leader (“Principal Investigator”) has the
 - power to assemble his/her research group;
 - freedom to choose the research topic.
- Individual teams should consist of a grouping of researchers which meets the needs of the project, without “artificial” administrative constraints; thus members may be drawn from one or several legal entities, from either within or across national boundaries, including third countries

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Who can apply?

European and International Teams

- Ideas (ERC specific programme) encourages participation of researchers from European and non-European countries
- Level of participation varies with regard to **roles** and **funding**
- Roles:
 - Principal Investigator
 - 25 EU Member States
 - Associated Countries (e.g. NO, IS, CH, IL), incl. ACC (RO, BU,TR, HR)
 - Team Members
 - 25 EU Member States
 - Associated Countries (e.g. NO, IS, CH, IL), incl. ACC (RO, BU,TR, HR)
 - International Cooperation Partner Countries (ICPC)
 - Industrialised Countries, e.g. Australia, Canada, Japan, USA

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Who can apply? Funding of International Teams

➤ Funding

→ Possibility of funding in all cases

- 25 EU Member States
- Associated Countries (e.g. NO, IS, CH, IL), incl. ACC (RO, BU,TR, HR)
- International Cooperation Partner Countries (ICPC)

→ Funded only if indispensable

- Industrialised Countries

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ICPC

International Cooperation Partner Countries

ICPC are classified as low to middle income countries including:

- Mediterranean partner Countries
- Western Balkans
- Eastern European and Central Asian countries
- ACP, ASIA, Latin America

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Applications for Grants

- Two-step application Procedure (due to large number of expected applications)
- Eligibility (ERC Starting Grant)
 - First independent research team
 - Less than 10 years since completion of PhD
 - Only one ERC Grant per investigator may be active at any one time

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Evaluation Process

➤ Peer Review Evaluation

- Approx. 15 high level panels (~10 members)
- Multidisciplinary projects encouraged (appraised by all appropriate panels)
- Possibly have ScC member as observer on each panel

➤ Evaluation Criteria

- Excellence of project
- Potential of people (research excellence, achievements, publications)

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ERC Budget 2007-2013

- Total budget (2007-2013) : €7460m
(revised Commission proposal)
- First Year: Approx. €300m

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European Events with ERC participation

- **Euroscience Open Forum (ESOF2006):**
Munich, 15-19 July 2006, Discussion forum on the European Research Council with the participation of Prof Kafatos
- **FP7 launch event for information multipliers**
Brussels, 7-9 February 2007, conference aimed at intermediaries and at stakeholders of European research policy
- **ERC launch conference**
Berlin, 26-28 February 2007, organised with the German EU presidency as high-level conference
- **European Research Event with Public Exhibition**
Brussels, 7-18 March, Political High-Level Event with Presentations and Exhibition on European Research Success Stories

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Further Information

Website of the ERC Scientific
Council at <http://erc.europa.eu>