



Universities at a Crossroads

Science and Education
between Ivory Tower and
Market Place

Dr. Reinhard Grunwald
Strasbourg, February 7, 2009

DFG

Between Two Hard Places

**Top
research in
the USA &
other high-
tech
countries**

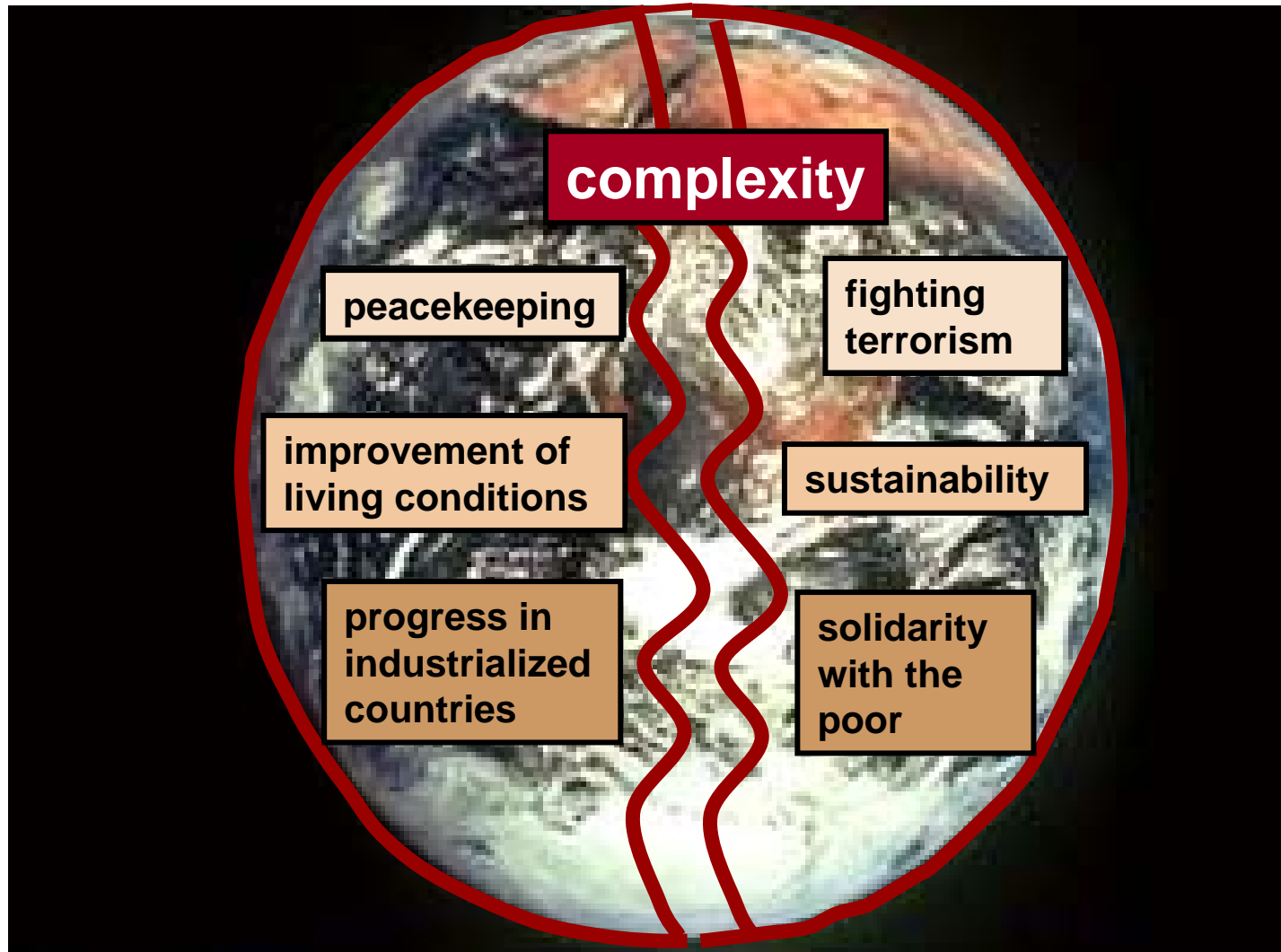
**Western
Europe**

**Eastern Europe & Asia
catching up**



Illustration taken from: <http://perso.wanadoo.fr/mon.bateau/images/mythologie/symplegades.jpg>

Science for Innovation: Aims Envisaged



Knowledge
is the basis for action

Reasons for Internationalisation

- **increasing globalisation**
(economy; global questions: migration, climate)
- **European integration**
(developing a European Research Area / Higher Education Area)
- **fierce competition of the best and for the best**
- **increasing mobility**



International Co-operation

Problems

- **competition**
- **rigid structures**
- **national traditions**
- **lack of mutual trust**
- **diverging interests**
- **insufficient legal frameworks**

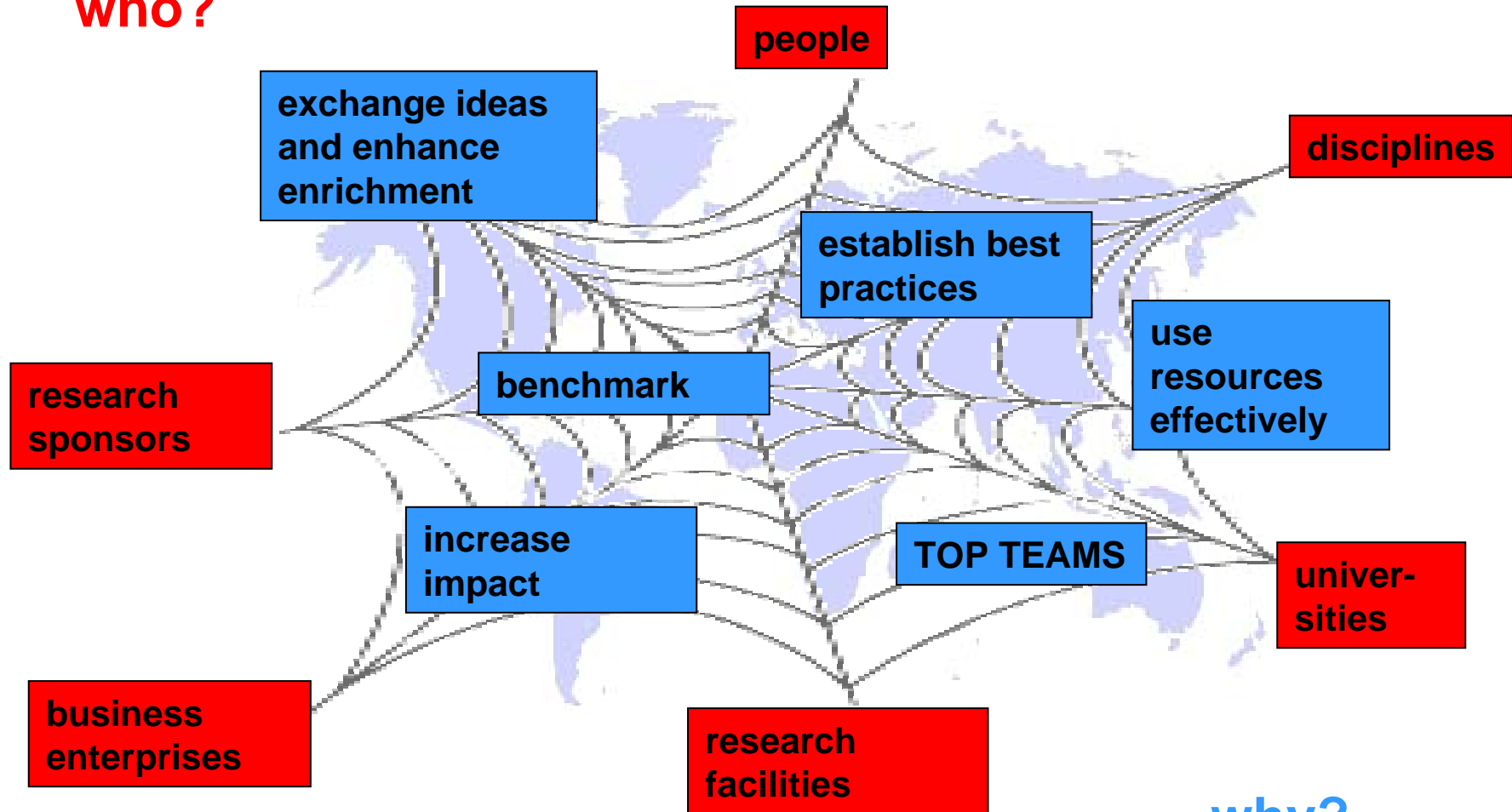


Advantages

- **competition**
- **added flexibility**
- **access to a large, international knowledge-pool;**
- **acquisition, development and improvement of techniques and know-how**
- **common interest; mutual benefit; added value**
- **finding solutions to global problems**

Innovation needs international integration

who?



why?

The Tripod of Internationality

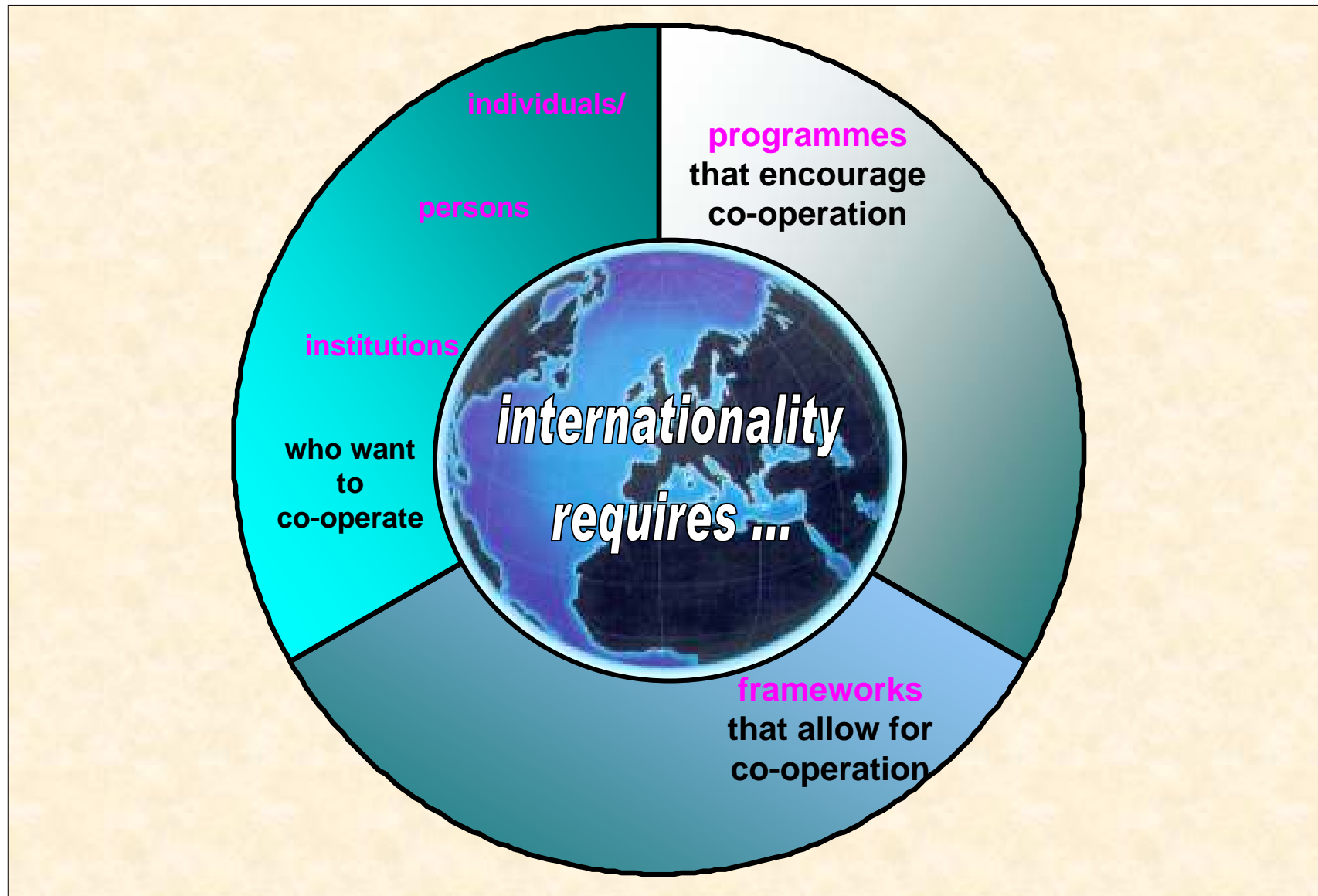
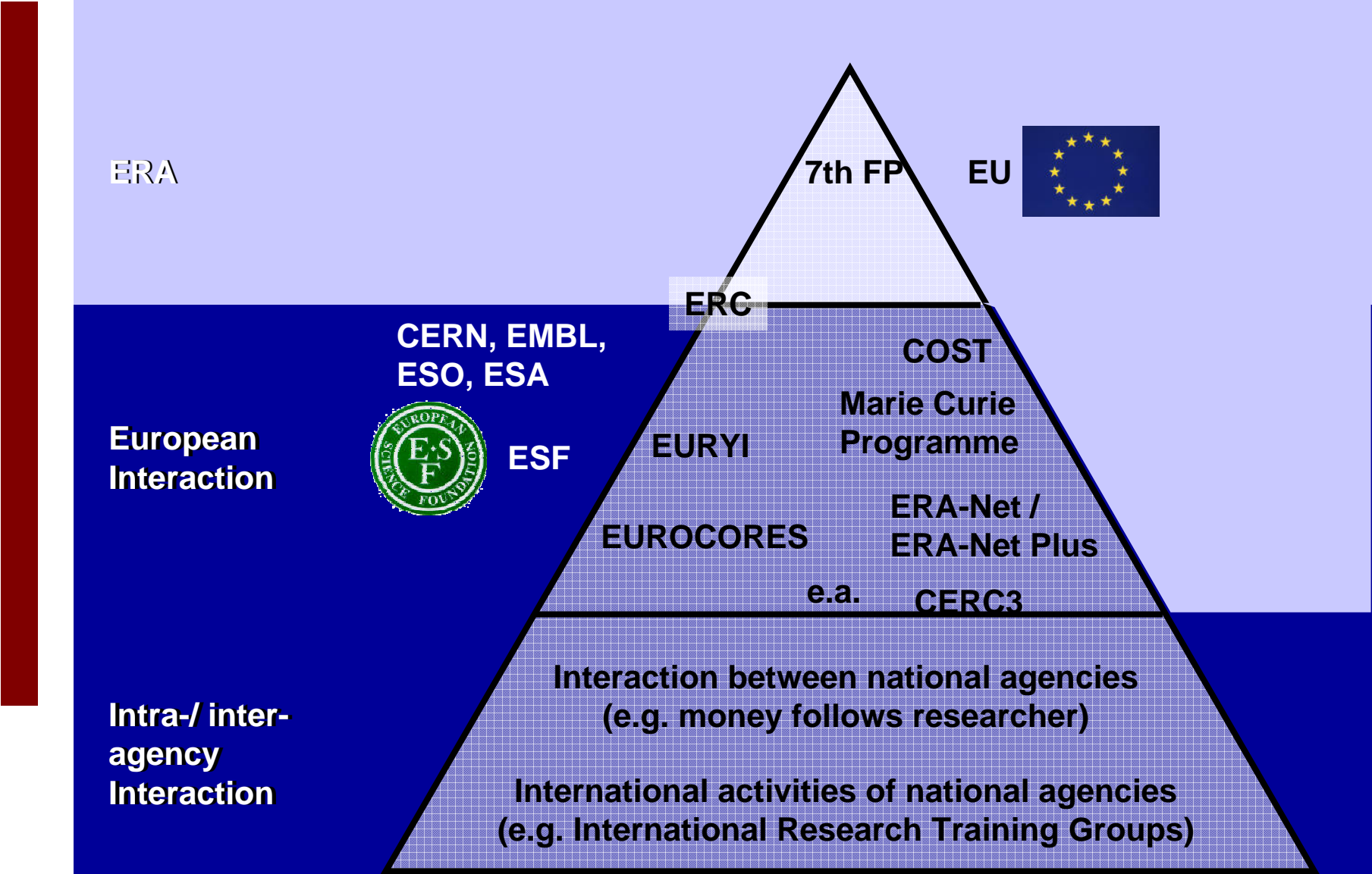


Illustration taken from: <http://www.jakob-ag.de/images/erde.jpg>

Levels of European Interaction



The European Research Council


- **Funding of basic research in all fields of science and the humanities**
- **Peer Review system**
- **excellency as the sole selection criterion**
- **governance structure: "at arm's length" to the EU Commission**

- **budget in total (2007-2013) : 7,56 bn €**
- **1st year: approx. 300 mio. €, 2nd ca.750 mio. € 3rd ff. ca. 1 bio.€, 15% FP7**

TWO FUNDING INSTRUMENTS

1. **ERC *Starting Independent Researcher Grant Scheme* (from 2007)**
 - approx. 200 grants annually , up to 5 years
 - 100 - 350 mio. € per year
2. **ERC *Advanced Investigator Grant Scheme* (start in 2nd year of ERC, 2008)**
 - approx. 200 grants per year
 - 100 – 500 mio. € per year

Challenges



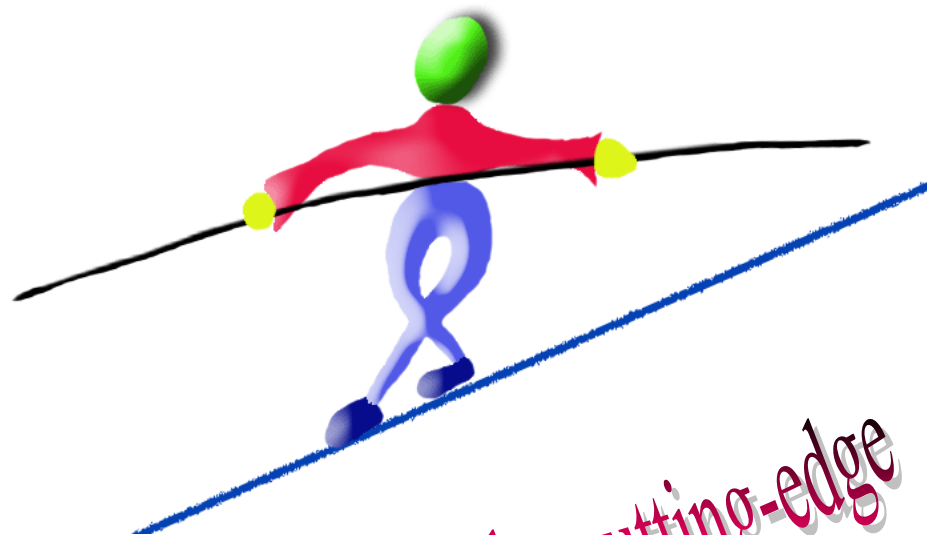
Practical questions:

- **calls für proposals**
- **developing common standards**
- **reviewing process**
- **evaluation of research results**
- **financing**
- **legal conditions**
- **framework conditions**

The Balancing Act of Internationalisation

keeping the balance

co-operation



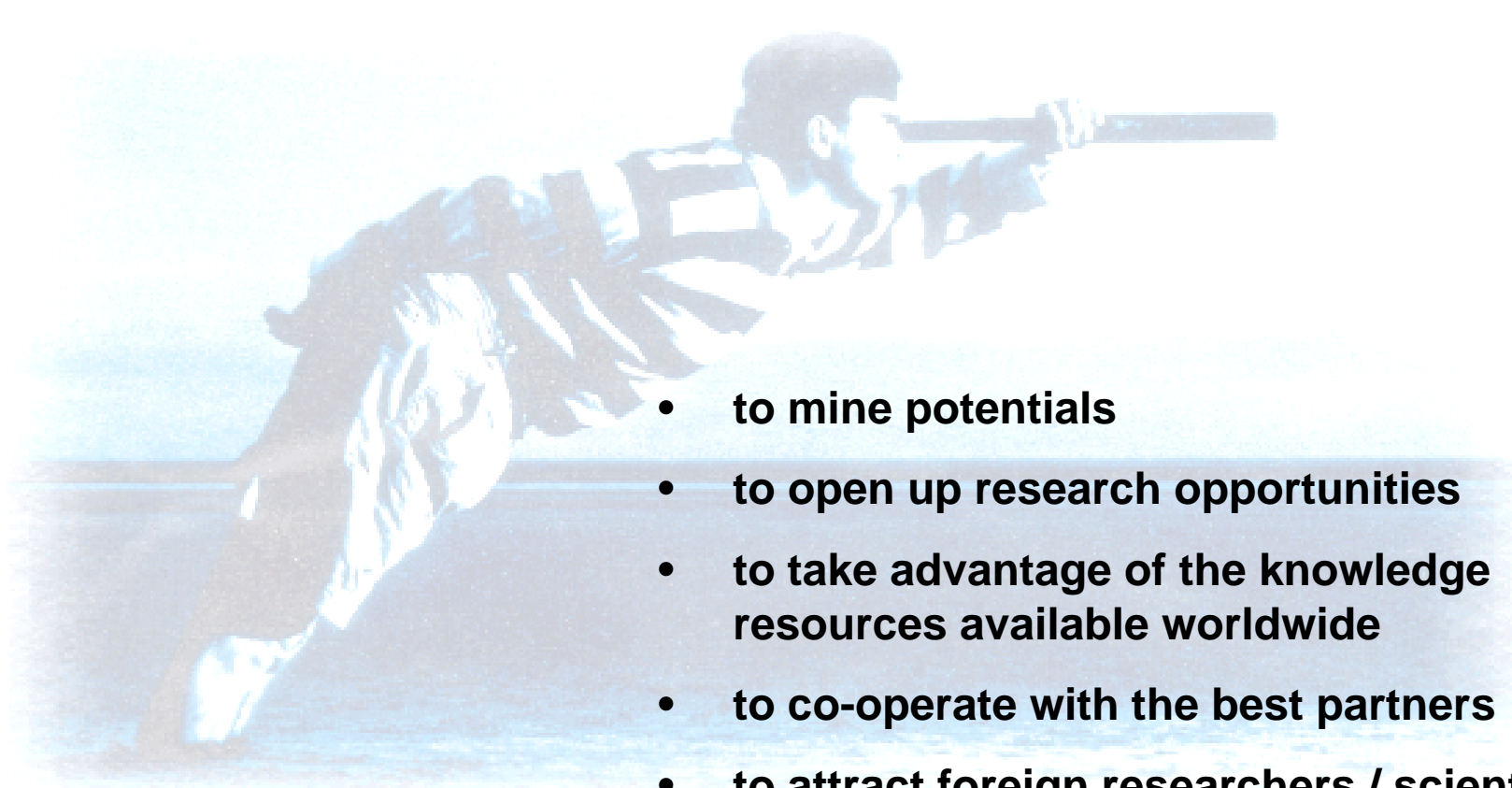
competition

in order to stay at the cutting-edge

What does this mean for the individual university?

- . Nosce te ipsum: Get to know your strengths, weaknesses, opportunities.
- . Create an environment which attracts the best teachers and students.
- . As much central leadership, planning and quality assurance as necessary, as much decentralized responsibility and room for creativity as possible,
- . Trust and help – especially the young scientists, not to become little Ceasars quickly, but to become good Senators in the science republic,
- . Establish international best practice and quality standards.

How to Go about It?



- **to mine potentials**
- **to open up research opportunities**
- **to take advantage of the knowledge resources available worldwide**
- **to co-operate with the best partners**
- **to attract foreign researchers / scientists**
- **to internationalise education**
- **to further international agendas in politics, society, research and research management**

Facilitating smooth sailing

**integrating research
infrastructure on a
national and European
level**

**strengthening
innovative, research-
active regions**

Western Europe

**developing new key
technologies**

**high-tech
industry**

**low-wage
countries**

**strengthening basic
research on a national
and European level**

**enhancing
networking
between
industry and
research and
industrial
application**