

# ECRI 2007<sup>★</sup>

  
★ *european conference on research infrastructures*

# *Towards Career Opportunities for Young Scientists in the EU*

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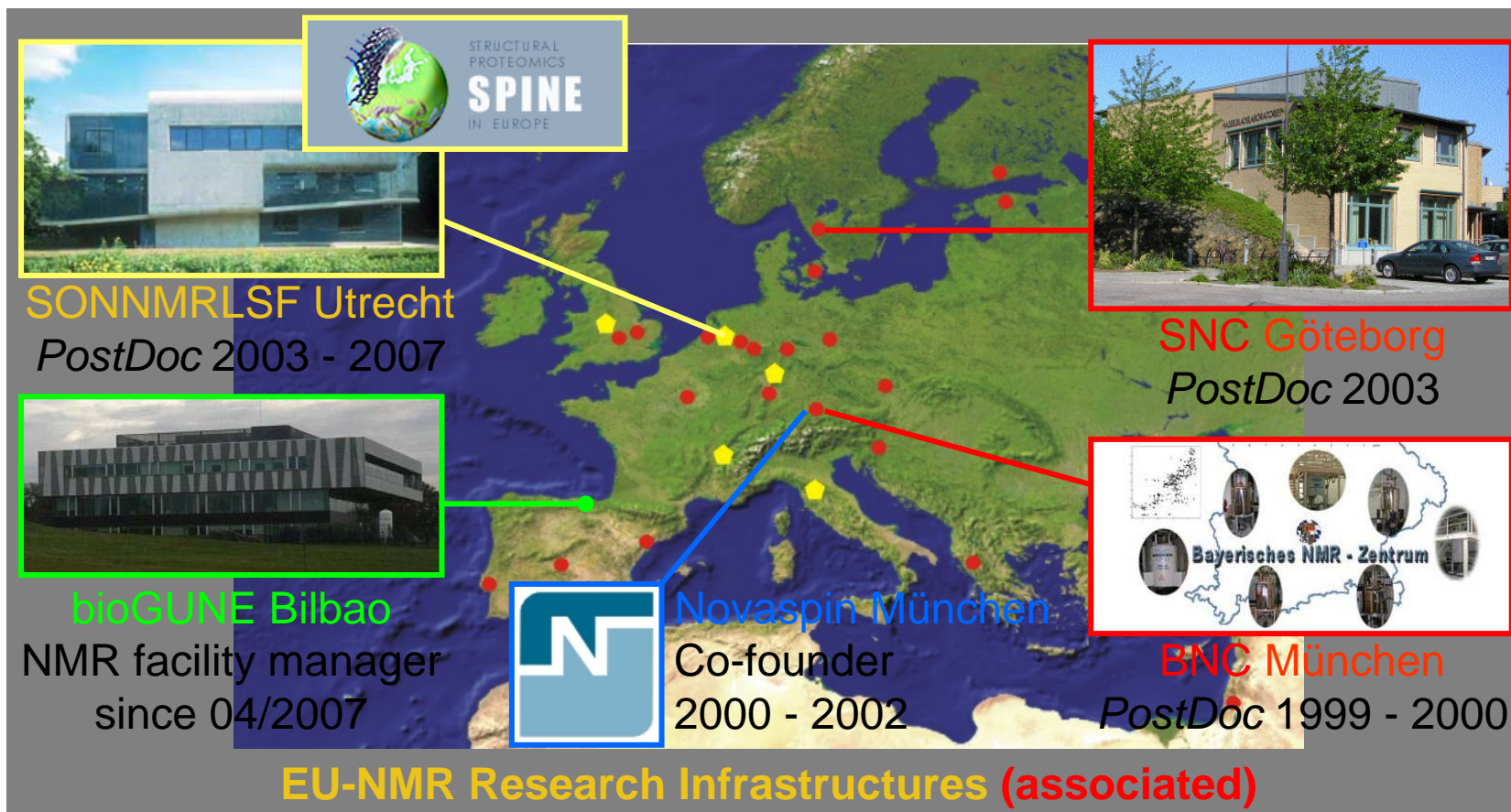
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## A European odyssey for a stable employment in research



## Working at an ERI: a great **scientific playground**

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ERIs offer to the research community and young scientists:

- + **outstanding equipment** for most advanced experiments
- + **superior funding situation** (*not* for stable employment)
- + **international environment**
- + **collaboration opportunities**
- + **special skills** (project management, machine handling, etc.)
- + **special points in the CV** (of *uncertain* value)

The EU offers **world-class research facilities & equipment** that easily stand comparison with global competitors.

## Working at an ERI: the **essential needs for success**

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To **justify** investments, ensure **optimal** use and **maximum** return-on-invest, **ERIs need permanent staff** for:

- *continuous* operation by top-qualified expert personnel
- *continuous* maintenance & modernisation
- *continuous* accumulation & distribution of knowhow & experience
- *continuous* cutting-edge facility operation & service
- *continuous* user training & support
- *continuous* facility management

The required **continuity, reliability and professionalism for optimal use** of ERIs can only be ensured by **permanent scientific staff!**

## Working at an ERI: a **recipe for inefficiency**

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To **justify** investments, ensure **optimal** use and **maximum** return-on-invest, **ERIs need permanent, not temporary staff** for:

- **continuous** operation by top-qualified expert personnel
- **continuous** maintenance & modernisation
- **continuous** accumulation & distribution of knowhow & experience
- **continuous** cutting-edge facility operation & service
- **continuous** user training & support
- **continuous** facility management

Relying on **temporary staff** in precarious positions is **irresponsible** and in turn puts the costly ERIs in a **precarious** position!

## Working at an ERI: a **dangerous trap** for PostDocs

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Working as **temporary staff** at an ERI entails severe **risks**:

- **limited training opportunity** (lack of experienced staff)
- **abusive duties** (substitution for missing permanent staff) leave
- **limited time** for genuine research & publishing
- **reduced employment perspectives** in
  - industry → stigmatised as 'over-specialised, too old'
  - academia → only genuine research & publications count

The ongoing lack of a sustainable employment politics **endangers** the investments in material assets and **exploits** young scientists at ERIs, and in European research in general.

## Research in the EU: a **risky personal sacrifice...**

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General situation for researchers in the EU (public & private sector):

- **broad denial of a *primary employment market*** with stable career perspectives, social security and appropriate salaries; instead a
- ***bazar* of precarious temporary contracts & practicals** with need for
- **insecure, continuous *job vagrancy***
- **incompetitively late entry into working life**, often with low salaries
- **demotivating, intransparent selection systems** with crippling dependencies, nepotism and discrimination

Investing into a lengthy, costly education as scientist is a substantial *personal sacrifice* with social, financial & private *detriments*.

## Research in the EU: ...and **macroeconomical waste**

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This **depreciation of professional researchers to disposable low-cost short-term jobbers** entails *severest macroeconomical damages*:

- *wasted money* for **undervalued education & training**
- *wasted money* for **inefficiently exploited research equipment**
- *costly losses* from **demotivated, incalculable temporary personnel**
- *costly losses* from **provoked shortage of experts** (detered students)
- *costly losses* from **strengthening global competitors** (beneficiaries of our policy) with **top-qualified emigrants**

**The EU's research infrastructure is dangerously imbalanced:**  
*a world-class equipment in material is **jeopardised and devaluated**  
by an *inappropriate (under-)equipment in scientific staff.**

## Research in the EU: **where to look for rescue?**

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### (Many) National research systems

- *paralysed* by established interest groups
- *largely unaware* of (blind to?) and *inactive* about the misery



### Private institutions

- + more *independence*, *variety* of interests (but less political weight)



### EU

- + (still) largely *unencumbered* from established interest groups
- + *more open* to include new parties (young researchers, experts)
- + *aware* of the misery, and *willing to act*. ERC, IDEAS (FP7), and...

## The European Charter for Researchers

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### Preamble

(4) [...] Europe must *dramatically* improve its attractiveness to **researchers** [...] by helping to create the necessary conditions for *more sustainable and appealing careers* [...]

(8) The ultimate political goal [...] is to contribute to the **development of an attractive, open and sustainable European labour market for researchers**, where the framework conditions allow for *recruiting and retaining high quality researchers* in environments conducive to effective performance and productivity.

(14) Funders or employers of researchers [...] should be responsible for providing researchers with *open, transparent and internationally comparable selection and recruitment procedures*.

## Section 1 - The European Charter for Researchers

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General Principles and Requirements applicable to Employers and Funders:

### Recognition of the profession

All researchers engaged in a research career should be recognised as *professionals* and be treated accordingly. This should commence [...] at postgraduate level [...]

### Stability and permanence of employment

Employers and/or funders should ensure that the performance of researchers is *not undermined by instability* of employment contracts [...]

## Section 1 - The European Charter for Researchers

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General Principles and Requirements applicable to Employers and Funders:

### Funding and salaries

Employers [..] should ensure that researchers enjoy *fair and attractive conditions of funding and/or salaries* with adequate and equitable social security provisions [..] *This must include researchers at all career stages including early-stage researchers [..]*

### Career development

Employers [..] should draw up [..] a *specific career development strategy for researchers at all stages of their career*, regardless of their contractual situation [..], thus *motivating them and contributing to reducing any insecurity in their professional future [..]*

## Section 2 - Code of Conduct for the Recruitment of Researchers

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### Postdoctoral appointments

Clear rules and explicit guidelines for the recruitment and appointment of postdoctoral researchers, including the *maximum duration* and the objectives of such appointments, should be established [..]. Such guidelines should take [..] into consideration that the *postdoctoral status should be transitional*, with the primary purpose of providing additional professional development opportunities for a research career *in the context of longterm career prospects*.

'The European Charter for Researchers' on the internet:

<http://europa.eu/eracareers/europeancharter>

## ***General demands for a funding policy to improve research conditions in Europe***

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- **Rigorously enforce the *European Charter for Researchers***

The Charter essentially identifies the reasons for Europe's low attractiveness to top-qualified researchers, and pinpoints the remedies:

- ⊕ ***motivate*** researchers by offering stable employment contracts
- ⊕ ***ensure*** non-discriminating, transparent recruitment processes
- ⊕ ***acknowledge*** and treat researchers as professionals

This Charter proves the *EU's competence and legitimation to play a more active and direct role* in the European research system.

The EU must now rigorously enforce the Charter by indispensably **linking any funding to its *strict and verified observation!***

## ***General demands* for a funding policy to improve research conditions in Europe**

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- **Increasing the research budget is not paramount**

An increased research budget is *not justified without changing* the current policy that fails to tackle Europe's main problem: the *costly brain-drain and wasting* of its scientific middle class by systematic denial of motivating professional perspectives!



Are current players (political, academical and industrial establishment) too *biased*? Why is the *active scientific middle class excluded* from the expenditure decisions?

## ***General demands* for a funding policy to improve research conditions in Europe**

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- **Shift funding from equipment to employment**

Existing research *equipment is already competitive*, now shift focus to *create a sustainable primary employment market for scientists* (stable career perspectives, adequate salary) - before they leave!



Is the current focus on equipment primarily *industry subsidising*, and job scarcity used as a lever to *secure privileges* of the academic establishment?



*Citation from real life (between professors):*  
"Why would you want to give your post-doc a permanent position? Then you cannot control him anymore!"

## ***General demands for a funding policy to improve research conditions in Europe***

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- **Break monopolies - sponsor more projects with less budget**

*Promote equal chances, dynamic diversity and creative novelty - avoid fostering an increasingly inflexible research monoculture!*

*Economic analogon: success of micro-credit banking!*



Is current research funding driven by *prestige thinking* and lobbying to conserve grant monopolies and an ancient academic establishment?



Citation from real life (diagnosis of a EU MP):

"The distribution of EU funds conserves existing structures"

## ***General demands* for a funding policy to improve research conditions in Europe**

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- **Invest only if employment of sufficient personnel is secured**

Running expensive research infrastructure on precarious positions is *irresponsible waste of money* and cannot ascertain sustainability, optimal use and maximum return-on-invest!



Can this requirement *reduce the risk of failed invests* in unserious and premature projects launched primarily for *short-term grant harvesting*?



Citation from real life (professor to PostDoc):

*"Don't worry so much about the promised milestones for the project extension - we'll just write up a new proposal!"*

## ***Specific proposals* for a funding policy to improve research conditions in Europe**

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- **Create personalised, tenured 'EU researcher' positions**

**The EU** should adopt a much more active, direct and persistent role in the European research system, and go beyond mere *investment-on-request* from the academical & industrial establishment:

⇒ *directly finance tenured EU researcher positions to qualified persons, not institutes (cf only temporary EURYI positions)*

This would allow EU researcher to move on to more attractive institutes in justified cases, **promoting mobility and positive competition** within European academia and weaken its crippling system of institutionalised dependencies.

## ***Specific proposals* for a funding policy to improve research conditions in Europe**

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- **Introduce alternative, unbiased grant selection mechanisms**

To promote equal chances, dynamic diversity and creative novelty the EU should introduce alternative granting schemes *outside the reach of established grant monopolies*:

⇒ grant some of the funding for young researchers on the basis of an unbiased *drawing system, waiting list etc.*

Given general qualification (graduation), no potentially biasing pre-screening of the applications is needed for such *one-time small-scale funding*, where possible losses are also limited.

*Economic analogon: success of micro-credit banking*

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## **The ambiguity of linking public research funding to industry participation**

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Implication of industry in public research projects is desirable:

- directs research **towards marketability** (*still basic research?*)
- **contributes resources and know-how**
- may **offer employment** (to researchers tested in collaboration)
- may **leverage budget** (hope for co-sponsoring from industry)
- **increases attraction** for students (hope for employment)

Primary expectation from a closer interaction between research and industry are **positive impulses for economy and employment market.**

## The ambiguity of linking public research funding to industry participation

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Why shouldn't industry abuse public funding to sponsor its genuine R&D projects, and joint projects to down-size own R&D personnel by 'out-sourcing'?



*Examples from real life:*

*Industry partner developed instrumentation without any relevance to SPINE project (later commercialised)*

*Even routine structural biology tasks are usually out-sourced to academic partners, saving own personnel*

## **The ambiguity of linking public research funding to industry participation**

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Linking public research funding to industry participation follows Europe's traditional **top-down policy of subsidisation**, but:

- **not money, but excellence** must attract industry for sustainability
- **excellence requires motivated** top-qualified researchers
- motivation is linked to **social security & career perspectives**

A *sustainable* growth in excellence and interaction between industry and academics will only result from the *same basic requirement* to improve the European research environment:

**Invest in *social security & reliable career perspectives* for (young) researchers to increase their motivation!**