What might make a research career in Europe attractive?
A prospective from a EURYI awarded

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1. Summary of Subgroup on research career development
Eero Vuorio & Irina Kauhanen

• Lack of transparency in recruitment,
• Short term contracts with low job security, and lack of adequate social security and pension rights,
• Badly structured, inappropriate funded and poorly supported post-doc positions, and
• Overall low predictability of research career.

Full agreement on the 4 statements:
They could not be more concise and accurate!!
2. Spanish situation:

- **Difficult to get in** ⇔ linked to teaching needs ONLY
  
  "the CV paradox" → best CVs → Ph D fellowship → not stabilization at the end
  
  → not so good CVs → teacher assistants → stabilization

- **Difficult to get a promotion** ⇔ linked to University budgets

  Chapter I (personnel) expenses > money received from government !!

  Income limited since tuition fees are determined by government

- **Great disparity of competition between researchers**... but very similar salaries

  "US-like researchers" → very active → get projects, get problems: personnel purchases physical space

  "old-style civil servants" → low efficiency

  (sometimes from disappointment with "the system")
3. Roles, rights, responsibilities of young researchers and superiors

- In principle, it is good to advance in these definitions, but...

**Before:** 4 years of Ph.D. student (fellowship)
**Now:** 2 years of Ph.D. student (fellowship)
  + 2 years of contract

What happens if Ph.D. Thesis not finished in 4 years?

**Advantages:** social security, unemployment security, etc.

**Disadvantages:** cannot receive a post-doctoral fellowship after contract
  ⇒ higher labor costs, not always possible
  total amount of money constant ⇒ higher taxes, less income
4. Insufficient Mobility of Young Researchers

• Ph D with European mention (~ “ERASMUS” at Ph D Level)
  - much more mobility
  - still many do not do it because of lack of perception of real benefits

• After Ph D: mobility ↓:
  - different scales between countries
  - different social rights (transfer of social rights?)
  - typically until you do not get a tenured (permanent) position do not even consider a sabbatical leave:
    your position may not exist when you will be back!
5. My (EURYI awardee) experience (i)

My professional career: “I am a privileged person, many others also deserved it”

Promotions decided at University level ONLY

<table>
<thead>
<tr>
<th>Eng. studies</th>
<th>Ph.D</th>
<th>Assistant Professor type-2</th>
<th>Assistant Professor type-3</th>
<th>Associate Professor</th>
<th>Nat. Habilitations</th>
<th>Nat. Accreditation</th>
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Sabbatical leave
MIRSL (U. Massachusetts)

The professional career of most of my colleagues

<table>
<thead>
<tr>
<th>Assistant Professor type-2 or 3</th>
<th>Associate Professor</th>
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<td>1992</td>
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New plan of studies begins
More lecturers needed

More than 50% lecturers have temporal contracts: stabilization process begins
5. My (EURYI awardee) experience (ii)

Assistant Professor
type-2 or 3

Associate Professor


New plan of studies begins
More lecturers needed:

- 1 year renewable contracts (max 3 years + 1)
- Social security

More than 50% lecturers have temporal contracts: stabilization process begins

- Permanent position (civil servant)
- Social security

Today:
- Ramón y Cajal (researchers): 5 years + stabilization: how? many unknowns remain
- Juan de la Cierva: 3 years → out
- Lecturers

- Co-existence of researchers with lecturers/researchers at Universities:
  Lecturers/researchers feel that teaching prevents them from doing more research → main criteria for promotion
  Researchers feel that no teaching prevents them from entering in the system → teaching is a prerequisite
5. My (EURYI awardee) experience (iii)
EURYI has provided me:

- Research independence
- Professional recognition (jealousy as well!)
- Boost professional career: multiplicative effect in all indicators

<table>
<thead>
<tr>
<th>1992 ... 2003</th>
<th>2004 ... present</th>
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<tr>
<td>- 41 journal papers</td>
<td>⇒ 70 + 5 submitted</td>
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<tr>
<td>- 3 book chapters</td>
<td>⇒ 5 + 1 full book in process</td>
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<td>- 90 conference presentations</td>
<td>⇒ 154</td>
</tr>
<tr>
<td>- 3 patents</td>
<td>⇒ 4</td>
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<tr>
<td>- 697 Keur in projects</td>
<td>1.633 Keur in new projects as PI</td>
</tr>
</tbody>
</table>

+ 1.055 Keur of EURYI

Management
director of CRAE
director of IEEC (late 2008)
PI of secondary payload

Higher visibility and participation in Administrative Committees of International Professional Societies
6. What can make a research career attractive? (i) (in a University environment)

If you join the University:

• **It is NOT** a matter of money... but you want to be able to buy an apartment and sustain a family!

• It is **because you are “curious”** and want to learn doing **research**, and

• It is **because you like teaching and being in contact with students**, but not to be “drown” with too many teaching obligations

  6 h of lectures / week max + students tutorization: OK
6. What can make a research career attractive? (ii) (in a University environment)

If you stay in the University:

• It is because overall you like it,

But:

• You would like to know from the beginning the “rules of the game”:
stable and predictable career
   → if you do/achieve what you are supposed to do/achieve

• Be able to apply to your own research projects (with chances of success)
   → typical comments for evaluation committees: oo young, lack of experience
   not under the umbrella (shadow?) of your advisor until his/her retirement
6. What can make a research career attractive? (iii)
(in a University environment)

If you get your own projects:

- Be able to get some vital space to carry it out among a “feudal” structure
  Vital space = lab space for instruments + office space for you and your team

- Be able to have some flexibility to hire/fire people
  (salary / working conditions) according to their value.

- Be able to buy goods with some flexibility (> 18 Keur):
  3 offers, committee review etc OK
  Bureaucracy ↓

... but after all, #2 and #3 are tolerable if you got the project!
#1 is a pre-requisite to do it!!
7. Conclusions:

What might make a research career in Europe attractive?

1. Know the rules of the game from the beginning (career):
   Ph. D. → researcher (and lecturer) in tenure track
   Ph. D. + 5 → associate professor (tenured position)
   Ph. D. + 15 → full professor (tenured position)
   (Ph. D. + > 20-25 ? → full professor?)

2. Be allowed to grow and mature on your own: get your own projects
   “pass from research adolescence to maturity”