# Marie-Curie Fellow ... and then?

Some considerations

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# My CV

- 1996: Dr. rer. nat., University of Bonn
- 1997 2000: Postdoc at IRA-CNR, Bologna, in EU network for `Training and Mobility in Research' (TMR) Consortium for European Research on Extragalactic Surveys (CERES)
- 2001 2002: Marie-Curie-Fellow at ASTRON, Dwingeloo
- 2002: Ricercatore (permanent staff member) at IRA-INAF, Bologna

### **EU – Research Training Networks**

FP3: Human Capital and Mobility: HCM

FP4: Training and Mobility of Researchers: TMR

FP5: Improving Human Potential: IHP

FP6: Marie-Curie-Research Networks





- TMR Network: Consortium for European Research on Extragalactic Surveys (1997 – 2000)
- Six teams from four countries
- ASTRON, IoA Cambridge, IRA-CNR, JBO,
   Obs Lisbon, Uni Groningen
- Nine postdocs (4 D, 1 GR, 1 I, 1 NL, 2 UK)

### What happened to the CERES postdocs?

CERES postdoc	After 1 year	After 3 years	After 8 years
1	Postdoc (home)	Permanent (home)	Permanent (home)
2	Postdoc (3 <sup>rd</sup> EU)	Permanent (host)	Permanent (host)
3	Postdoc (host)	Temp. staff (host)	Permanent (home)
4	Postdoc (home)	Temp. staff (home)	Staff (home)
5	Temp. Staff (home)	Temp. staff (home)	Temp. Staff (home)
6	System Manager (non astr., home)	System Manager (non astr., home)	System Manager (non astr., home)
7	Research Scientist (non astr., host)	Research Scientist (non astr., host)	Patent Examiner (European Patent Office, host)
8	Postdoc (host)	Civil Servant (ministry, home)	?
9	Postdoc (non astr., host)	Temp. Staff (astr., non-EU)	?

Impact assessment of the Marie Curie fellowships under the 4<sup>th</sup> and 5<sup>th</sup> Framework Programmes Of Research and Technological Development of the EU (1994 – 2002) (June 2005)

Total population: 11802 fellows and 6036 supervisors 52% of fellows and 81% of supervisors could be reached Questionnaire was answered by 47% of contacted fellows and 29% of contacted supervisors, results are considered as representative of the entire population

47% of grant holders were at post-graduate level (Ph.D. students). 49% of grant holders were at post-doctorate level.

#### Results from

- analysis of population of fellows
- on-line questionnaires
- in-depth interviews (75 fellows, 75 supervisors)
- literature review, policy analysis, secondary analysis from related projects

#### Characteristics of the scheme

Evaluation procedures were perceived as meritocratic and objective MCF are reference point in setting a good example to regional and national policy makers

Meritocracy and competition contribute to the prestige of the MCF

For 45% of fellows the prestige of the MCF was one of the main reasons for applying 49% thought it more prestigious than other fellowship schemes

### Supervision and training

Quality of supervision rated highly: 38% `extremely good', 33% `good', 10% `poor' High training impact, in terms of additional scientific and complementary skills, and interdisciplinary experience

Training through work side to side with other members of the host research group, which provides exposure to new knowledge and ideas.

### Main perceived impact of MCF

#### Fellows:

- international research experience
- development of research skills
- opportunity to have dedicated time to carry out research

#### Supervisors:

- Research competence
- Time/workforce to do research
- Ability to attract excellent researchers

=> Strong impact of MCF on the building of research groups in Europe

### Transnational mobility

For 79% of fellows major reason in applying was to gain international experience 28% would definitely not have gone abroad without the MCF For 50% of post-graduates and about 1 third of postdocs, the fellowship constituted their first exposure to mobility

#### **Destinations**

UK (28%), France (17%), Germany (12%), Netherlands (9%), Spain, Italy (6% each) Current new member states became gradually eligible only during FP5.

#### Origin of fellows

Spain (16%), Italy (14%), Germany, France (13% each)

### Unbalanced flow of fellows within Europe

Receiving countries: UK, Denmark, the Netherlands, Norway

Sending countries: Slovak Republic, Iceland, Hungary

### Post-fellowship mobility flows

Over 90% of respondents had remained in Europe after the end of the fellowship. Return rates to the home country increased over time. Four years after the fellowship, 56% of fellows had returned (postdocs 50%, postgraduates 40%). No clear gender differences, fellows with children more likely to return.

#### Return rates and nationality:

Spain (58%), France (48%), Germany (46%), Italy (44%)

Lowest return rates: UK/Ireland (30%), South-East Europe (27%)

Fellows on longer fellowships were less likely to return.

MC Return fellowships (with limited eligibility in FP4 and FP5) did not have significant impact.

- ~ 30% of fellows returned to their previous institution of work
- ~ 25% work in another institute in their home country
- $^{\sim}$  22% of postgraduates and 30% of postdocs remained in the host country, most of these working in the host institute

Interviews identified a range of factors critical to fellows' location decision:
Research intensive areas were a powerful attraction to fellows:
level of expertise and resources concentrated in specialist centres
greater range of employment opportunities for scientists and their partners

Choice of host institution heavily influenced by pre-existing connection

Prestige of the institute or reputation of the supervisor

Ability for partners and children to accompany fellows, or for fellows to be able to visit family and friends in the home country both cheaply and easily.

Availability of work positions for partners

Improve language skills (particularly in English)

Lack of language skills, or those of their partner, restricts choice of destinations

Opportunity to return to or remain in Europe

Costs of living and housing despite generous allowances in MCF scheme

#### Post-fellowship career development

Dispersion to other areas of activity after the research fellowship is fairly low (90% of fellows were still active in paid research at the time of answering the questionnaire).

Fellows typically have a more stable contract situation after the fellowship than before (after 4 years 42% of postgraduates and 63% of postdocs had a permanent position).

After the fellowship 68% operate at a higher level of responsibility at work. Level of satisfaction with salary before and after has increased.

⇒ Conclusion: MCF contributes to consolidating the researchers' career position

Observational bias: Numbers might be too optimistic? Control sample?

#### A contribution to a sustainable network

Data point to a significant impact of the Marie Curie fellowships in networking between researchers in Europe.

MCF strengthens existing connections for 34% of post-graduates, 40% of postdocs and 73% of senior researchers.

MCF generates new contacts: over 70% of fellows established contacts which were influential for their subsequent career progression, and 86% maintained contacts with their host after the fellowship.

### Tangible research output

Mean average publication rate for post-doctoral MC Fellows was 3.1 for those in universities, 2.6 in research centres, and 1.2 in industries.

### Gender equality and representation

Female researchers up to 40%. No gender bias was perceived.

Researchers with children participated successfully in the MCF.

# Individual Marie-Curie Fellowship

#### Intra-European Fellowships for Career Development (IEF)

Researcher with Ph.D.

Salary for researcher and contribution to research-related costs up to 24 months

Find a host institute and a host scientist
Write joint proposal with your host (candidate, host institute, project)

#### http://cordis.europa.eu

Next deadlines: Probably in late summer 2009 (last in Aug 19, 2008, published on Mar 19, 2008)

Needs a lot of time (~ 1 year)



# Individual Marie-Curie Fellowship

### Return fellowship (ERG)

Researchers with Ph.D. and at least 18 months FTE MCF support

Flat-rate contribution to the project costs (fixed amount of 15000 Euro per year, up to 3 years)

Find host institute in your EU home country (preferred) or any other EU country of your choice

Apply together with the host institution at least 6 months before end of current MCF to allow smooth transition

MARIF CURIF ACTIONS

Deadlines in 2009: April 2, October 8

http://cordis.europa.eu

# Good luck!