

Career strategies (not only) for European PhD students (IV)

# The 7th EU Framework Programme (I)

In the first of two parts we're focussing on the basics of research funding by the European Commission (EC) within its 7th framework programme.

The programme took off in January 2007 and the first application deadlines are coming up very soon. Here I'll give you rather a general overview and come back with more details in a future issue of *Lab Times*. As you might already be aware, there are plenty of opportunities and – perhaps more importantly – lots of dough. However, be aware that not all funding possibilities pave your way to independence. More than 10,000 scientists will be funded by Marie Curie Actions each year but just participating in an EU project or having an EU fellowship does not automatically make you part of a selected circle of researchers.

To put it bluntly, if you are a PhD student, early on in a post-doc career, or if you have something to offer and no time to lose, then stay away from these fellowships! If you find that filling out the annual income tax forms is already a nightmare, dealing with the EC's funding machinery will definitely beat the pants off you. On the other hand, if your research life hasn't been running too smoothly and you still want or have to stay in science, this might be one of the last chances to win your own funding. I was trying to figure out how many di-

rect and in-direct costs arise at the national and European level in the whole process of EU funding. How many cents or even euros does it actually take to get one euro into a scientist's pocket? I got the impression that either these numbers don't exist or they're hidden at Fort Knox. Maybe no one really wants to know!

## FP7 Basics

FP7 stands for the European Union's Seventh Framework Programme for Research, Technological Development and Demonstrating Activities. So for the rest of this article I'd prefer to go with FP7. FP7 was approved by the European Parliament late last year and will run between 2007 and 2013. The European Research Commissioner Janez Potocnik acquired a €53 billion budget, which is a significant increase from the €19 billion of the previous, albeit shorter, FP6 programme. Without wishing to be rude, one of the greatest challenges of establishing a new framework programme is to find novel and lustrous names for old hats! So this time, the four major funding lines or specific programmes are **Cooperation**, **Ideas**, **Capacities**, and **People**. Only

the name of the fifth funding line **Euratom**, a specific programme for nuclear research, has been continuously used over the last 50 years.

As in previous framework programmes, the lion's share goes to large applied research projects with many participants from different research institutions, universities and smaller or larger

companies. With a total budget of €32 billion this funding scheme is now called **Cooperation** and supports research in ten thematic areas, of which areas "Health", "Food, Agriculture & Biotechnology" and maybe "Nano-Production" are most interesting to our readership. As a researcher early in their career, you might participate in these collaborative projects as a regular PhD student or post-doc, once they are approved.

Some, but not all, previous excellence actions have been put together under **Ideas**, which is funded by FP7 but has been outsourced to the European Research Council (ERC). This means that the ERC will function "independently" between the paper-shufflers of the European Commission and a yet-to-be-formed administrative agency. The ERC will establish a work programme and an evaluation scheme, and has to report annually on the programme progress. Hopefully, this move will enable a transparent and quick evaluation process with less bureaucracy for all parties involved. **Ideas** is not limited to life sciences and is going to support individual researchers across all areas of research with €7.5 billion - excellence being the sole evaluation criterion. There will be three major checkpoints for excellence: you as principal investigator, your proposed research project and your research environment.

## For starters and advanced

Two types of ERC grants will be available: (1) About 200 ERC Starting Independent Researcher Grants (ERC-STG) per annual announcement, which are "calls" in EU terminology. These grants support researchers at the stage of establishing and leading their first research team. The level of funding will be between €100,000 and €400,000 per year for a period of up to five years. There will be a two-step evaluation process. At first you prepare an outline proposal (8 pages) describing yourself, your potential to become a world-class researcher and your project. After the success-



### Box 1: The FP7 People Programme with integrated Marie Curie Actions

- (1) Initial Training Networks (ITN), also called Marie Curie Networks
- (2) Life-long Training and Career Development
  - (2.1) Intra-European Fellowships (IEF)
  - (2.2) European Reintegration Grants (ERG)
  - (2.3) Co-funding of Regional, National and International Programmes (COFUND)
- (3) Industry-Academia Partnerships and Pathways (IAPP)
- (4) International Dimension
  - (4.1) International Outgoing Fellowships (IOF)
  - (4.2) International Incoming Fellowships (IIF)
  - (4.3) International Reintegration Grants (IRG)
- (5) Specific Actions on Mobility & Excellence
  - (5.1) Researchers' Night (NIGHT)
  - (5.2) Marie Curie Awards (AWARDS)
  - (5.3) Enhanced Networking and Improvement of National Contact Points and Mobility Centres



ful first evaluation round you have to prepare a more detailed proposal (16 pages) and give an interview. Watch out! The first deadline for your application is the 25th of April 2007. (2) For leading advanced investigators, who have already established themselves as independent research group leaders, there are ERC Advanced Investigator Grants (ERC-AIG). About 200 grants will be available per call providing up to €3 billion each. There are currently no announcements for this grant scheme, but they are expected in the second half of 2007.

**Capacities** with a budget of €4.1 billion will not only provide research infrastructure of all sorts in seven areas, e.g. financing telescopes, radiation sources, clean rooms and data banks, but also strengthen local research clusters called “Regions of Knowledge” or research in less advanced European regions in an action called “Research Potential of Convergence Regions”.

The mobility fellowships are now incorporated into the FP7 People programme, sometimes also referred to as **People Programme**, with integrated Marie Curie Actions. It has a budget of €4.75 billion and supports researchers as individuals or as part of networks with fellowships, grants and awards and will be discussed in detail below.

### The FP7 People Programme

According to an EU brochure, the aims of the People programme are “to motivate more people to pursue a research career, to encourage researchers to stay in Europe and to attract the best brains to Europe”. As the

discussion about European “brain drain” has been ongoing for decades and has already justified several previous framework programmes, one would have expected a little bit more “justification” this time. Five primary actions have been chosen to reach these goals and are listed in Box 1. This list is long and boring but it may assist you in finding the fellowship, grant or award that suits your research needs.

### Host- and individual-driven

Concerning fellowships, there are primarily two types available: host-driven and individual-drive. **Host-driven fellowships**, for example Marie-Curie Networks, are initiated by host organisations such as universities, research centres, companies, international European interest organisations such as EMBL etc. They have to define a larger research project and give details on how many PhD students or post-docs (within the first five years of their career) are needed to perform the project. After a year or so, the whole project might finally be approved, all contracts signed and the job vacancies to be filled within the project are ready to be announced on the Internet or published in international journals. You can apply now if you fulfil all criteria for the job. In general, you have to move between EU countries and there are certain limitations if you have already worked in your host country. I will not further comment further on host-driven fellowships today.

**Individual-driven fellowships**, as offered under “Life-long Training and Career Development” or “International Di-

mension”, are initiated by the individual researcher. There are three different types of these fellowships. You must either move between European countries (Intra-European Fellowships or IEF), leave Europe (International Outgoing Fellowships or IOF) or come back to Europe (International Incoming Fellowships or IIF). One of your first steps is to figure out, whether your CV reflects the fellowship you would like to have. Don’t expect this to be simple! Each year up to 10% or more of all fellowship applications are dropped because they didn’t fully meet the criteria. Important criteria are your own nationality and the nationality of your host country. For some fellowships you have to be from or you have to move into an EU Member State or an Associated country. There are several backdoors. For example, if your nationality is not listed but you have already been working three out of the past four years in a country on this list, you are treated as a researcher of an EU Member State or an Associated country. Also, if your nationality is on this list and you have been working in a country not on the list for three out of the past four years, you may choose any country on the list, including your country of origin. Carefully read the text in the announcement for your fellowship. Then you have to write an application together with your host organisation. After a positive evaluation your host institution receives the money for your pay cheque and a few extras.

And then there are **Marie Curie Grants!** To win them you have to find a host willing to provide you with an adequate re-



search contract. So you need to be employed by non-EU funds. The grant will provide some extra cash that can be used either to increase your salary or to partially cover the expenses associated with your project at your host institution, such as salary costs for additional staff, travel costs, consumables, patent costs or publication costs. For **European Reintegration Grants or ERG** this means €15,000 per year for up to three years, for **International Reintegration Grants or IRG** the contribution is €25,000 per year from two up to four years. To apply for an ERG you must have been funded already by a Marie Curie action under FP6 or FP7 for at least 18 months; to apply for an IRG you must have been working outside an EU Member State or Associated country for at least three years.

Finally, there are **Marie Curie Awards**. You can apply by yourself or be nominated by someone else. Five awards are made annually with €50,000 each for a researcher previously funded by an EU mobility action for 12 months or longer. As a prize holder you are expected to praise European research funding at public events. Do you really want to do this?

### European Money for European Research

Although you might not know how to apply, it is not too early to have a look at the pecuniary side. How much money can you expect? According to the EC, at least the equal amount of cash given to an equally qualified researcher working in your host country. Of course, as you all know, there are many differences between fellowships and first time employees might not enjoy all benefits in the beginning. There are three FP7 categories to help to calculate your salary. You are either paid as an Early-Stage Researcher, usually in the first four years after receiving a degree, which would formally entitle you to start a doctorate, or you are paid as an Experienced Researcher with 4 to 10 years experience or as an Experienced Researcher with more than 10 years experience. In addition, it is important to determine whether your host institution prefers to recruit you with an employment contract/fellowship with full social security coverage or on a fixed amount fellowship with minimum social security. The reference rates for living allowances are listed below. They are multiplied with a correction factor specific to your host country. This factor varies widely between 0.434 (Sudan) and 1.499 (Iceland) and is deduced from salaries of official EU employees. It might not necessarily take into account all the coun-

try-specific taxes, nor social security and health insurance costs.

Furthermore, should you have to move to another country you receive a monthly mobility allowance, again multiplied by the correction factor. The reference rates for you as a researcher without family is €500 and with family €800 per month. Additional benefits are a travel allowance, which is paid annually as a fixed-amount contribution dependent on the shortest route between your home and host base and the length of your stay, a one-time career exploratory allowance of €2,000 for stays of at least one year, which may be used for job interviews, additional courses etc., and a monthly contribution for research expenses, meeting attendance etc. ranging from between €300 and €800. Please note that not all expenses are covered in all Marie Curie actions. Overall, it is hard to calculate the net amount of cash that ends up in your pocket each month.

### The Information Highways to FP7

Before applying you have to become familiar with FP7 research funding and the EC terminology. One way to start is to attend information events providing an overview of FP7 actions. Whether you really benefit from these events depends on the dedication, knowledge and experience of the lecturer. In any case you might be able to pick up one of those multi-coloured high-gloss brochures on FP7 there. However, this might not be sufficient for your needs, so, sooner or later, you will have to research FP7 on the Web. In this instance, the problem isn't finding information but trying not to get lost and jumping from one link to another. I'll attempt to tell you below where to look first!

Most importantly you need to know whether there are open announcements or calls for fellowships or grants. Go to <http://cordis.europa.eu/fp7/calls>. The abbreviations given in Box 1 will help you to find the right call. In the call you will find the deadline(s) for your application. Each call is associated with an information package specific to the fellowship/grant you have selected. Here you can look up details of the requirements you have to meet in order to apply; instructions for filling out the application forms, evaluation procedures and timetables and much more. Note that sometimes at the start of a framework programme not all documents you need are available.

If you now have more specific questions, you may contact the Europe Direct Contact Centre via email at [\[search/enquiries\]\(mailto:ec.europa.eu/research/enquiries\). They will funnel your request to the appropriate department of the Directorate-General for Research of the European Commission at Brussels. Another central electronic info source is the CORDIS helpdesk at <http://helpdesk.cordis.europa.eu>. CORDIS is the European Union Community Research and Development Information Service. You have to register and log into your password-protected area, where you will even find interactive answers! At the national level you may also approach your National Contact Point. These are the official national information providers and might be associated with government departments; most often they are outsourced to a funding agency, a foundation or other types of advice centre. A list of these is found at \[http://cordis.europa.eu/fp7/ncp\\\_en.html\]\(http://cordis.europa.eu/fp7/ncp\_en.html\). If you prefer to talk to real people, you will also find phone numbers there.](mailto:ec.europa.eu/re-</a></p>
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### Electronic help

Maybe just two more things I'd like to share with you. If you have technical problems with the electronic submission of your application, you can get help via the EPSS Helpdesk. EPSS is the Electronic Proposal Submission Service at [http://cordis.europa.eu/fp7/epss\\_en.html](http://cordis.europa.eu/fp7/epss_en.html). EPSS is not yet operational but will be opened in late March 2007. If you need to know, whether there is a vacancy in an FP5, FP6 or FP7 sponsored research project go to ERA-MORE, a website run by the European Network of Mobility Centres at [http://ec.europa.eu/eracareers/index\\_en.cfm](http://ec.europa.eu/eracareers/index_en.cfm). In the middle of January 2007 more than 850 jobs in EU-funded projects were listed. You might ask why there are still open jobs in the database from the previous FP5, which ended in 2001. Well, sometimes it just takes a little bit longer until an EU-funded project gets its final go ahead! ERA-MORE is also a good starting point for practical questions concerning country-specific regulations and nuts and bolts on visas, work permits, taxes, child support, health insurance etc. The content provided there is highly heterogeneous and depends on the efforts and quality of the respective national mobility centre. Sometimes you get really helpful tips and addresses, sometimes you receive more general advice, such as "Ask your employer" or "Contact the tax authorities", and sometimes you are just linked to a government department.

Next time more detailed information on fellowship applications and the ensuing procedures once your project has been approved.

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