



# Writing Research Grant Proposals

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#### European funding opportunities

## Marie Curie Actions = People Programme



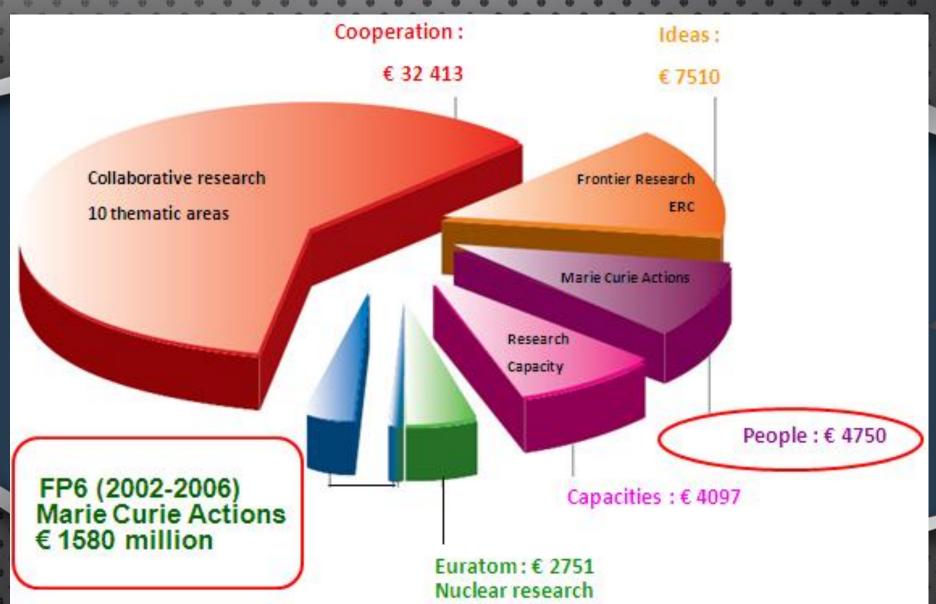


#### **Important links**

http://ec.europa.eu/research/mariecurieactions

http://cordis.europa.eu/fp7/people/home\_en.html

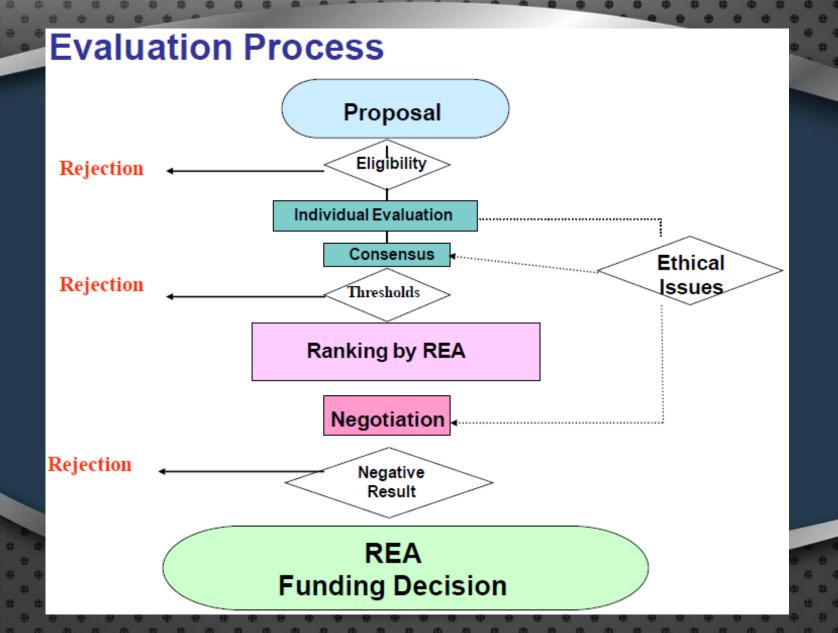
## **FP7-Overview (2007-2013)**



## FP7-Overview (2007-2013)

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Nu	mber of ap	oplicants 20	Funding thresholds 2011									
	IEF	IOF	IIF		IEF	IOF	IIF					
LIF	968	243	396	LIF	89.2	90.7	88.7					
ENG	305	118	181	ENG	0.88	88.9	89.4					
MAT	107	21	42	MAT	87.0	85.6	87.5					
ENV	440	155	138	ENV	89.4	91.0	90.1					
ECO	80	17	28	ECO	85.3	93.2	89.0					
SOC	532	147	103	SOC	89.0	90.9	93.1					
PHY	376	87	181	PHY	88.7	90.5	88.0					
CHE	346	68	221	CHE	89.1	89.4	88.6					
Sum	3154	856	1290									
Total funded	600	164	204	umanii								
	Eartn & Environmental Sciences     Feartn & Environmental Sciences											

## FP7-Overview (2007-2013)



## Host-driven actions

Initials	Name	Summary
ITN	Initial Training Networks	An international network to train research students
IAPP	Industry Academia Partnerships & Pathways	A joint research project with industry involving secondments of existing staff
IRSES	International Research Staff Exchange Scheme	A research partnership (with selected countries)* involving seconding or hosting of researchers
COFUND	Co-funding of Regional, National and International Programmes	40% co-funding to support a fellowships programme for post-PhD researchers
NIGHT	Researchers' Night	A Europe-wide public and media event to publicise research careers

#### **IRSES**

- Purpose: aims to strengthen research partnerships through staff exchanges and networking activities between European research organisations and research organisations from other countries.
- established in at least *two independent organisations* established in at least *two different EU Member States (MS) or Associated Countries (AC)*, and one or more organisation(s) either located in a country with and S&T agreement or or in Other Third Countries covered by *the European Neighbourhood Policy*.
- Duration: 24-48 months. The maximum duration of the individual staff exchanges is 12 months, which can be split into several exchange periods within the total duration of the programme.

http://ec.europa.eu/research/mariecurieactions/about-mca/actions/irses/index\_en.htm

ippi.con

## IRSES: Eligible Participants

#### The EU 27 Member States:

Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, and the United Kingdom.

#### The Associated countries2:

Albania, Bosnia and Herzegovina, Croatia, Faroe Islands, FYR Macedonia, Moldova, Iceland, Israel, Liechtenstein, Montenegro, Norway, Serbia, Switzerland, Turkey.

#### Countries with an S&T agreement with the EC<sup>3</sup>

Algeria, Argentina, Australia, Brazil, Canada, China<sup>4</sup>, Chile, Egypt, India, Japan, Jordan, (Rep. of) Korea, Mexico, Morocco, New Zealand, Russia, South Africa, Tunisia, Ukraine, United States.

#### Other Third Countries covered by the ENP<sup>3</sup>

- a) Eastern Europe & Central Asia (EECA)
  - Armenia, Azerbaijan, Belarus, Georgia, Ukraine
- b) Mediterranean Partnership Countries (MPC)

Algeria, Egypt, Jordan, Lebanon, Libya, Morocco, Palestinian-administrated areas, Syrian Arab Rep., Tunisia.

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## **IRSES: Typical activities**

- Joint research and training activities or joint workshops and seminars, as well as other networking activities.
- Staff exchange between European Beneficiaries or between Other Third Country Partner organisations is not eligible.

#### Funding:

- For each member, the EU will pay a flat rate of €1900/month.
- Egypt is eligible for funding for incoming (if requested) and outgoing staff members.
- Total project budget can vary between €16 K-3.5 M.

#### **IRSES: Evaluation**

Evaluation Criterion	Weighting (in %)	Threshold
Quality of the Exchange Programme	25	N/A
Transfer of Knowledge	30	3
Implementation	15	N/A
Impact	30	3

- The proposal fails to address the criterion under examination or cannot be judged due to missing or incomplete information;
- 1 Poor. The criterion is addressed in an inadequate manner, or there are serious inherent weaknesses;
- 2 Fair. While the proposal broadly addresses the criterion, there are significant weaknesses;
- 3 Good. The proposal addresses the criterion well, although improvements would be necessary;
- Very Good. The proposal addresses the criterion very well, although certain improvements are still possible;
- 5 Excellent. The proposal successfully addresses all relevant aspects of the criterion in question. Any shortcomings are minor.

#### Individual Actions.

Initials	Name	Summary
IEF	Intra-European Fellowships	A programme for researchers to move within Europe*
IIF	International Incoming Fellowships	A programme for researchers based outside Europe to spend time in Europe carrying out research
IOF	International Outgoing Fellowships	A programme for researchers based in Europe to spend time outside Europe carrying out research
CIG	Career Integration Grants	A programme to help researchers to establish themselves in Europe

### **IIF-Key points**

- Aimed at 'Experienced Researchers' based in third countries.
- Skills diversification and knowledge sharing.
- 12 24 months incoming phase in MS/AC
- Possible 1 year reintegration grant for nationals from International Co-operation Partner Countries
- Individual applies with host
- Contract between European host institution and Commission for incoming phase, and between third country host and Commission for reintegration / return

http://ec.europa.eu/research/mariecurieactions/about-mca/actions/iif/index en.htm

#### **IIF-Funding**

- Monthly living allowance paid to researcher (+ correction factor)
- Monthly mobility allowance paid to researcher covers previous travel allowances & career exploratory allowance. (to researcher-€700/M without family; €1000/M with family).
- Contribution to the training expenses of eligible researchers & research/transfer of knowledge programme expenses (flat rate-to host organisation- €800/M)
- Contribution to overheads (flat rate-to host organisation- €700/M ).
- Re-integration phase (Flat rate-to home organisation- €15,000/ Y).

#### **IIF-Evaluation**

S & T Quality	25%	3/5				
Training & knowledge transfer	15%	No threshold				
Researcher	25%	4/5				
Implementation	15%	No threshold				
Impact	20%	3.5/5				
Ove	erall thre	shold 70%				

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"YOU GET TO SPEND A YEAR IN ANTARCTICA, WHILE I HAVE TO TO STAY HERE IN HAWAII, TO APPLY FOR GRANTS TO EXTEND YOUR RESEARCH TIME THERE."

#### Writing a Grant Proposal: Preparation

- What do you want to do? Why? (BTW, need to get some money and improve my CV isn't enough!!)
- What is the benefit of your project to science, environment, society, humanity...etc
- How much money do you need?
- What type of collaboration is required? Do U need partners?
- Which funding object(s) prioritise your project aims.
- N.B. These preparations take place mainly in your mind and don't require writing tips.

## **Writing a Grant Proposal**

- Read the guidance for applicants very well (from cover to cover) then clearly identify the required elements and sections.
- There is no general format for the various types of offered grants but the funders are usually concerned with the following:
  - The project idea (science and technology, hypotheses, research gaps, innovation, objectives....etc.)
  - The researcher (track record, CV, leadership, independence...etc)
  - The host (person or organisation, Implementation capacity, support facilities, knowledge transfer, previous experience...etc)
  - The impact (publications, patents, media publicity, added value, conferences, dissemination, reports...etc)
  - Management and feasibility (tasks, timetables, budget, expertise....etc)

## The project idea

The **overriding hypothesis** that current research in this area must test, is that the presence of POPs (*e.g.* BFRs and PFCs) in consumer goods and materials results in substantial contamination of the human diet with resultant adverse health effects. Evidence exists that levels of certain BFRs and PFCs in diet are major determinants of human body burdens<sup>57,72</sup>, while other studies have reported positive correlations between human body burdens of BFRs and contamination of indoor dust<sup>17,73</sup>. Hence there remain five major questions to be answered if this overriding hypothesis is to be tested. Following logically along the source-to-human health effect continuum these are:

- (a) how do POPs incorporated within consumer products and materials contaminate diet?
- (b) what is the significance of dietary intake as a pathway of human exposure to POPs?
- (c) how bioavailable to humans are POPs in diet?
- (d) what is the impact of dietary contamination with POPs on human body burdens?; and
- (e) what are the human health impacts attributable to exposure to POPs via diet?
- While I have actively pursued lines of research that address questions (b) and  $(d)^{4,17,36,43,48}$ , this project aims to answer question (c).

#### The Researcher

- Don't be modest or underestimate yourself.
- Never Lie-This is FATAL!!
- Use the CV template provided by the Funder's website.

In addition to leading his research team in a field mission, the fellow made several crucial upgrades to the instrument while it was in service in the field, increasing the quality of data produced while minimizing downtime. Using available parts, he assembled and placed in service an electronically controlled shutter that was needed to properly measure the instrument background, and took the unconventional step of using an entire tank of pure air in about one hour to zero the instrument when it was necessary to prove that an oset was not causing spurious results.

Highlight the aspects of independence and leadership in your career.

#### The Host

- The track record and expertise of the hosting group/professor.
- The "world-leading" status of the hosting organisation.
- Why this project should mainly be performed by YOU and your collaborators in the CHOSEN PLACE?
- The support provided by the host to the applicant.
  - Facilities/Infrastructure.
  - Collaborations
  - Experience of multi-national projects at Lead Scientist,
     Departmental and/or institutional level
  - Personnel (HR or finance)/research capacity/critical mass
- N.B. This part is usually written by the host, mostly from templates
  provided by the hosting organisation.

#### The Impact

## B.5.6 Plans for dissemination of results and impact of the proposed outreach activities

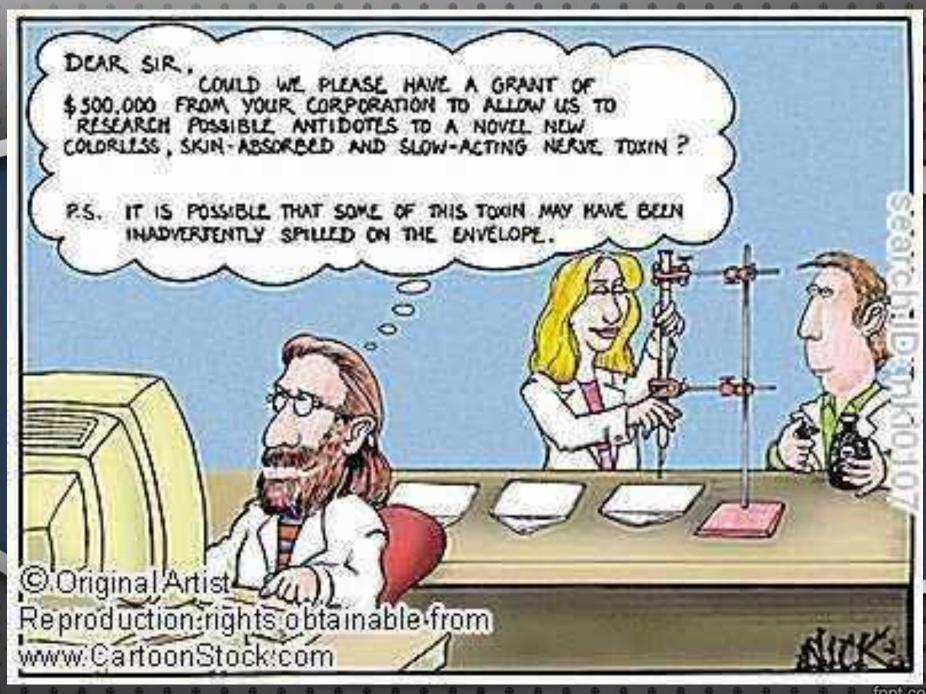
The results of A-TEAM will be disseminated by a combination of conventional scientific outlets, as well as via routes that seek to raise awareness of the relevant outcomes. amongst a wider audience, including the general public. Dissemination to the science community will occur via activities such as:

- Publication of results in high-quality peer-reviewed papers
- Oral and poster contributions by trainees and supervisors at conferences
- A-TEAM network conference (B.5.2)

A-TEAM is fully cognisant of the fact that science does not exist in a vacuum and that scientists increasingly need to ensure that the societal benefits of their research are understood and recognised. To best achieve this, A-TEAM's trainees will work with professionals in the field of science communication to develop and put into practice their communication skills. The principal contributors of such expertise are IVL's Knowledge section, and UB's "Ideas Lab".

These are planned such that each trainee will participate in one outreach activity *per annum. They consist* of:

- Podcasts
- · Webinars.
- An A-TEAM "Open Day"



## Writing a Grant Proposal: General tips

- Use simple, clear and plain language, preferably in the active voice.
- Read the grant call very well and try to identify some keywords to be wisely used in your aims/objectives section and to link your project outcomes to the Funder's priorities.
- The given word limit is not to be exceeded; but you don't have to reach it in every section of the proposal.
- Highlight the multi-disciplinary aspects of your project. In multipartner projects, the PI should be the one gathering all the threads.

## Essential points to include in a grant proposal

- The important problem in your field that your proposal will address; the scientific, social, economic, policy etc **IMPACT** that the project may make; and perhaps the broader implications.
- > Current knowledge statement and the gap. The "knowns" in the field most relevant to this proposal. However, our understanding of XXX (your topic) remains poorly understood...
- > Why the gap is important to fill. (importance, significance, and worth supporting).
- > Our long-term goal is.... The problem in the broader perspective. This should be a problem big enough to keep the investigator occupied for a decade, or even a whole career.
- The aim of THIS application is.... Which key part of the long-term goal will YOU will be able to solve if this proposal is funded.

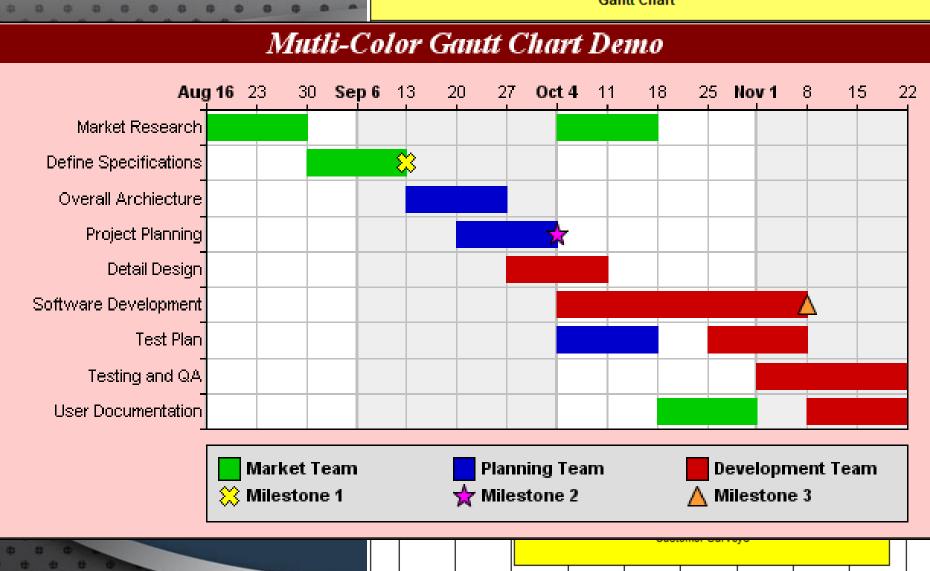
## Essential points to include in a grant proposal

- Our central hypothesis is... This is the thing that all parts of the application must point back to--again and again and again.
- > Timeliness. Explain why this project can and should be done NOW (window of opportunity). There is an awful lot of good science; you have to show why your project needs to be funded THIS ROUND.
- ➤ Rationale why this project can and should be done by YOU. Why you (and your collaborators) are "uniquely positioned" to do this work (e.g. new finding, novel technology...).
- > Clear and concise Objectives all related to the tested hypothesis and the projects aim(s).
- Outcomes "At the end of this study, we will have.....Our studies will enrich science, lead to new understanding and identify novel XXX etc... The expected outcome, the payoff as specific "deliverables" from the project. Also how this significantly contributes to the long term aims.



#### **GANTT** Chart

**Gantt Chart** 



### **GANTT Chart: Preparation**

- 1. Understand the work breakdown structure.
- 2. Gather necessary information about all steps or processes included in a greater project.
- 3. Build timelines.
- 4. Lay out all of the bars on the graph.
- 5. Evaluate dependency or relationships between phases or processes.
- 6. Implement the Gantt chart in software.

#### **GANTT** chart: Shape

#### MULTI-PARTNER ITN

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B.8 GANTT CHART Organised per Work Package and reflecting ESRs and ERs, Recruitments, Management and Dissemination/Outreach Activities																																																		
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K = Kick-off meeting; P = Podcast; OD = Open Day. E = End of project;																																																		

#### **GANTT** chart: Shape

Multi-partner project





Multi-national project





## Logical Framework Matrix (LFM)

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Project Description	Indicators	Source of Verification	Assumptions
Goal			
Objective(s)			
Results			
Activities			

### The Logic!

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Project Description	Indicators	Source of Verification	Assumptions						
Goal	If the OBJECTIVES are accomplished; Then this should contribute to the overall goal								
Objective(s)/ Outcome(s)	If DELIVERABLES are produced; Then the OBJECTIVES are accomplished								
Deliverables/ Outputs	If the ACTIVITIES are conducted; Then RESULTS can be produced								
Activities	If adequate RESOURCES/INPUTS are provided; Then the ACTIVITIES can be conducted								

#### Writing tips

## Project Description

Goal

The broad development impact to which the project contributes – at a national or sector level

Statement Wording: "To contribute to..."

Objective(s)/
Outcome(s)

The development outcome at the end of the project – more specifically the expected benefits to the target group(s)

Statement Wording: "Increased, improved, etc."

Deliverables/ Outputs

The direct/tangible results (goods &services) that the project delivers, and which are largely under project management control

Statement Wording: "delivered/produced/conducted, etc."

**Activities** 

The tasks (work program) that need to be carried out to deliver the planned results

Statement Wording: "Prepare, design, construct, research, etc."

#### LFM example

Project Description	Indicators	Source of Verification	Assumptions
To contribute to improved health, particularly of under 5s and the general health of the river ecosystem.	Incidence of water-borne diseases reduced by 30% by 2012, specifically among low income families who live by the river.	Municipal hospital and clinic records collected by mobile health teams.	
Improved quality of river water.	Concentration of e. coli reduced by 20% (compared to levels in 2003) and meets national health and sanitation standards by 2012.	Monthly water quality surveys conducted by the EPA and the River Authority.	-The Clean River legislation is introduced by the EPA and enforcedUp river water quality remains unchanged
1.1 Reduced volume of fecal waste discharged into river 1.2 Reduced volume of household refuse directly dumped into the river system	<ul><li>1.1 60% of household fecal waste is disposed of via latrines or sewage connections.</li><li>1.2</li></ul>	<ul><li>1.1 Annual sample survey conducted by municipality between 2009 and 2012.</li><li>1.2</li></ul>	-Waste water treatment meets national standards -fishing cooperatives meet obligations to establish waste collection systems
<ul> <li>1.1.1 Conduct baseline survey of households</li> <li>1.1.2 Prepare and deliver public awareness campaign</li> <li>1.1.3 Prepare engineering specifications for latrines and expanded sewage network.</li> <li>1.1.4 Etc.</li> <li>1.2.1 Etc.</li> </ul>	1.1.1 Baseline data (Knowledge Practice Coverage) for household waste management exists 1.1.2 Schedule of visits of mobile teams completed 1.1.3 Engineering plans approved by Ministry of Public Works Etc.	<ul> <li>1.1.1 6 month progress report</li> <li>1.1.2 Extension team progress reports</li> <li>1.1.3 Approved project charter from the Ministry of Public Works</li> <li>Etc.</li> </ul>	-Municipal budgets for improvements to sewage systems remain unchanged.

U

Deliverables/ Objectives/

ctivities



"My project is simply this. I want to find out once and for all whether there's any truth in the belief that money can't buy happiness."

## Thank you

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