



#### Marie Skłodowska-Curie Individual Actions: general Information and tipps for a successful application

Munich, 1. September 2015





#### Format

- Use footnotes at the bottom of each page endnotes or citations within the text are not allowed
- Use font size 11 in running text, font size 8 in footnotes
- Line spacing: single; not multiple or 1 ½ or so
- Use Arial, Arial Narrow or TNR you can save at least ½ page by using TNR compared to Arial
- Respect the page limit by all means





B.1 Excellence (Evaluation criterion 50%)B.1.1 Quality, innovative aspects and credibility of the research (including inter/multidisciplinary aspects)

- Introduction and state of the art: <u>do not write an abstract, write an</u> <u>introduction</u> (not as a start: "This research project focuses...", but "Since Einstein's groundbreaking theory of relativity, curvature of space is ..." – draw the bigger picture and tell a story!
- objectives (i.e. research goals) and overview of the action (Research Work Packages should be mentioned here): describe your research goals and how they are embedded into your work plan (the research work packages)





- Research methodology and approach: highlight the type of research and innovation activities proposed and connect them distinctively to your objectives
- Originality and innovative aspects of the research programme → how does the research project contributes to the advancement of the field? (use words like "novel", "innovative", "first-time", "advance", "inter-/multidisciplinary")





#### Important aspects apart from the mentioned subcriteria

#### **Strengths**

- Inter/multidisciplinary aspects have to be emphasized distinctively
- Research methodology has to be attuned to the research object and objectives explicitly
- Introduction is a launch to the overall topic, not an abstract of the proposal
- Short mentioning of potential risks



#### Important aspects apart from the mentioned subcriteria

#### Weaknesses

- Lack of current state of the art; most recent international results/developments are not mentioned
- Methodology is described in no satisfying conjunction with the objectives; pros and cons of the methodology are not explained explicitly enough
- Description of advancement of the field is missing
- No potential risks and alternative strategies are mentioned (short)





#### B.1.2 Clarity and quality of transfer of knowledge/training for the development of the researcher in light of the research objectives

- How does the researcher gain new skills by training at the host institution scientific skills and soft-skills?
- How does the host institution benefit from the research stay of the scientist and his/her expertise?
- **Global Fellowship**: How will the newly acquired skills be transferred back to the European host institution?





# Important aspects concernig the training (scientific training as well as training of transferable skills)

- Clarity and quality of the research training objectives (new techniques, new measuring methods etc.)
- Relevance and quality of the additional scientific education and the training of transferable skills

#### **Concerning the qualifications (esp. transferable skills):**

- They must be helpful to reach to reach an independent position in research (relevant for career development)
- Complementary to yet existing abilitites





#### Transferable skills considered to be appropriate

- Teaching as well as tutoring/mentoring of students and doctoral candidates
- Project-/Financial-/Organisational Management
- Development and organisation of follow-up projects (fund raising, proposal writing)
- Acquisition/Development of abilities in working in an international environment (communication, building networks)
- "Business Thinking"
- Personnel Management Leadership Skills
- Dealing IPR





#### **Frequently expressed criticism**

- Description of training aspects too short (how will the goals be achieved)
- Transferable skills are not described significantly enough (holistic development of the researcher is important, not only the scientific development)
- Lack of indicators/milestones to screen the training progress
- Training scheme is too ambitious
- Particular training elements are missing (esp. secondment to the industrial sector if possible)





#### Transfer of knowledge to the host instituion

- Transfer of **special scientific (unique) expertise** to the host institution through the fellow (for research)
- Transfer of this expertise to the host institution via teaching and mentoring ungergraduates and PhD-students
- Providing **new network opportunities** for the host institution





Adjust training and transfer of knowledge to the specific needs of the researcher and the host organisation

"Doing more with less":

- Concentrate on a few training activities you really need instead of trying to be trained in everything → unrealistic
- Acquire management and leadership skills → you will need them in your (non-)academic future as an independent and mature researcher
- Why is the host institution the perfect match regarding your accumulated (scientific and transferable) needs? How can your expertise promote the host institution?





#### **B.1.3 Quality of the supervision and the hosting arrangements**

#### **Qualifications and experience of the supervisor(s)**

- Track record (academic positions short)
- Level of experience on the proposed research topic
- How many publications (number) + most important journals? H-Index? Any major patents?
- Major international Collaborations + renowned Prices/Awards/Grants
- How many PhD-students/Postdocs so far? → "success stories" are they now in leading positions?





#### **Hosting Arrangements**

- Further members of the research group
- Further chairs/working groups at the institution
- Interdisciplinary discourse at the institutions collective colloquia?
- Integration into (inter-)national networks
- Career Development Plan short-term as well as long-term goals + European Charter for Researchers





# **B.1.4 Capacity of the researcher to reach and re-enforce a position of professional maturity in research**

- Research experience and results
- International Publications (first authorships/single authorships)
- Experience in project implementation/Management
- Fellowships/Awards
- Experience in supervision/teaching
- Experience in the industrial sector
- International collaborations so far





# **B.1.4 Capacity of the researcher to reach and re-enforce a position of professional maturity in research**

It is **not a renarration** of your CV (the CV is attached)

Do not write: "In 2011, I received my PhD with a dissertation dealing with [...] Then I moved to the lab of Prof. Brilliant at Wonderland [...] I have published in international Journals (Journal of Applied my field of research) [...] My research has been supported by grants of [...] Moreover, I supervised undergraduates during my stay at [...] and so on...





# B.1.4 Capacity of the researcher to reach and re-enforce a position of professional maturity in research

It is making a case for your capacity

" I conducted excellent research during my PhD-studies which led to major publications in [...] With joining the lab of Prof. Brilliant, I made the next important step in my career and proved to be able to work in an international research environment [...] Furthermore, I could acquire leadership and mentoring skills by guiding undergraduates [...] The initiation of international collaboration XY underlines my ability to build networks [...] etc.  $\rightarrow$  then give a prospect by linking it to your proposed research and show how these so far accomplished abilities more or less guarantee to be successful with the MSC-Fellowship





#### **B 1.4 – What experts appreciated to date**

- Being proactive/showing one's own initiative (initiation of cooperations (also with the industry or foreign countries), research stays abroad, short research stays in well-respected labs/research groups, organisation of scientific events)
- Proactive pushing of research activities, participation in project management, procuration of third-party funds
- Publications as single/first-author
- Supervision of students/doctoral candidates





Self Description

Do not be too modest (but of course stay authentic), your competitors are not that modest neither

Describe your **individual achievements** and **potential** → Explain why

- Your scientific background is (to a certain degree) unique
- You have an excellent potential
- You are perfectly able to carry out the project
- You would greatly benefit from this project





# **B.2 Impact (Evaluation criterion 30%) B.2.1 Enhancing research- and innovation-related skills and working conditions to realise the potential of individuals and to provide new career perspectives**

Illustration of how the research- and trainig-activities (incl. secondments) make a positive impact on the researcher's career  $\rightarrow$  Where do you want to go? How does the IF contribute to getting there?

And: Impact on European Research Area (ERA) and European society/economy





#### Impact – Impact on personal career development

- Now you are at 80%  $\rightarrow$  the MSC-IF gives you the missing 20%
  - You will be integrated into existing European and international networks of the host institution, as well as have created your own (transnational) networks
  - You will apply the project management experience in the future
  - You will apply your leadership skills you learnt through the supervision of undergraduates and PhD-Students in the future
  - You will unproblematically be able to work in an international and interdesciplinary research environment





#### Impact – Impact on personal career development

- You will be more visible in the scientific community as you will have produced great publications
- You will have gained teaching experience necessary to get a call for a professorship
- You will know perfectly how to write research proposals

Ideally, all this will bring you in a position to be a fully independent researcher, to apply e.g. for an ERC grant, to be a group leader/junior professor, to get a call for a chair, to initiate your own international collaborations as the coordinating person





#### **Impact on ERA**

- Your research contributes to Europe strengthening its worldleading position in your field of research (if Europe holds this position now), or
- Your research will help to reduce or close the gap to e.g. the USA/Asia (if they are currently leading)
- And: the new networks will be sustainable and contribute to European researchers' mobility in the future





#### Impact on European society/economy

- There is the Europe 2020 strategy (<u>http://ec.europa.eu/europe2020/index\_en.htm</u>),
- and there are 7 major societal challenges Europe has to face (<u>http://ec.europa.eu/programmes/horizon2020/en/h2020-</u> section/societal-challenges)

Inform yourself about them and try to embed your research into one of these challenges and mention it shortly in the proposal





#### These 7 societal challenges are

- Health, demographic change and wellbeing;
- Food security, sustainable agriculture and forestry, marine and maritime and inland water research, and the Bioeconomy;
- Secure, clean and efficient energy;
- Smart, green and integrated transport;
- Climate action, environment, resource efficiency and raw materials;
- Europe in a changing world inclusive, innovative and reflective societies;
- Secure societies protecting freedom and security of Europe and its citizens





# **B.2.2 Effectiveness of the proposed measures for communication and results dissemination**

#### **Communication/Public engagement**

The project **must reach a broad public (the tax payers, who in fact finance your research), not only a broad scientific community** (considered as essential).

Adequate measures to reach this goal are





- Collaborations with schools
- Participation in Girls' Day/Boys' Day or similar events → especially in science to reach the underrepresented females
- Open Lab Days, participation in science nights (MSCA Researchers' Night)
- Participation in scientific events, e.g. science slams
- Interviews with newspapers, articles in local press or articles in journals of popular science
- Public lectures (can happen in the context of conferences)
- Apply for MSCA-Fellow of the week on Facebook (<u>https://www.facebook.com/Marie.Curie.Actions</u>) or use other social media
- In case of installing a website: make sure it is linked to further sites to generate enough visitors (MPG, your university website and their social media sites)





#### **Communication and Public Engagement**

- These activities must be credible and, at best, in accord with own experience as well as existing activities of the host institution
- Always refer to the support of the institution's Press Office and Event Office and their contacts to the media etc.
- Explain why you are going to participate: Do not just write you will participate in the Girls' Day – you will participate because one cannot start early enough to try to raise curiosity for research (pupils) and, in this special case, to attract women for science (as they are underrepresented in e.g. Physics)





#### **Dissemination of research results**

- Identify your target groups (not necessarily just the scientific community, it can be e.g. politics, think tanks, special interest groups, companies etc. as well)
- Dissemination via journals: explicitly name the journals, do not just write "high impact journals/most renowned journals"
- Dissemination via conferences: explicitly name the conferences you are going to attend, do not just write "the results will be presented at the international conferences of the field"





#### **Dissemination of research results**

- Always mention open access though it is mandatory in MSCA anyway, one has to mention that there will be open access (e.g. arXiv.org)
- If there are further stakeholders: invite them to a talk, arrange a special section for them when organising a conference/workshop etc. – explain why your results will be of interest to them





#### **B.2.2.3 Exploitation of results and intellectual property**

- At best, the results respectively new techniques/methods are applicable immediately
- Applicability of the product in the industrial sector
- If not applicable directly: give a prospect how your results may be applicable in the long-term (pure research is seldom applicable immediately)
- Mention possible patents
- IPR Must be respected in any case: refer to IP-Department of your institution who will handle it, refer to the partnership agreement, refer to the accordance with IP-Guidelines of Horizon 2020

(https://www.iprhelpdesk.eu/FS\_IP\_Management\_H2020\_proposal)





# B.3 Implementation (evaluation criterion 20%) B.3.1 Overall coherence and effectiveness of the work plan (including appropriateness of the allocation of tasks and resources)

Write an introductory phrase that the plan is perfectly thought through,

then: shortly describe each work package (research work packages should have been described in the Excellence chapter) with its corresponding Deliverables and Milestones (and the secondment, if appicable)  $\rightarrow$  in running text, marked (D1.1, D1.2 ..., M1.1 ...) in heavy print – you does not have to use space wasting tables





# **B.3.2 Appropriateness of the management structure and procedures, including quality and risk management**

Project organisation and management structure

• Experience of the involved scientists and the finance department with the implementation of third-party funded projects; allocation of tasks in the project (who manages what?); progress monitoring mechanisms (e.g. bi-weekly meetings, short progress reports, attending colloquia to get feedback, CDP etc.)

Risks that might endanger reaching the project objectives

• Risk evaluation (research risks), especially if the project depends on external parameters/preconditions; outline alternatives in case of problems





#### **B.3.3 Appropriateness of the institutional environment (infrastructure)**

- Describe your workplace offered by the institution (equipment) and the institute
- Describe the key facilities (laboratories, libraries (access to how many e-journals etc.) necessary for your project
- Mention further institutions in the region (other MPIs with their facilities (if applicable), TUM and LMU, maybe Helmholtz if applicable, access to other libraries (Landes-/Staatsbibliothek as well) – draw a picture of an inspiring research region
- Mention by all means the Welcome Center/International Office (support in flathunting, dealing with public authorities and insurances, organisation of events for incoming fellows etc.), the Career Center (that offers the training courses) and whether your host is a family-friendly workplace (childcare etc.)





# B.3.4 Competences, experience and complementarity of the participating organisations *and* institutional commitment

To be honest, everything that is required here, has been already said in the proposal. After a short description of the host's contribution, write a

Short and concise statement, why this project in exactly this constellation (You, the host (expertise and infrastructure), the proposed research with its great goals and expected results) must be considered as outstanding / is a perfect match. It is synergetic and bigger than the sum of ist parts.

Make the reviewer think "Wow! This has to be funded without ifs and buts."





# **General Advices**

- Write the proposal in cooperation with the supervisor/host institution
- Let others (non-experts as well) read your proposal → listen to them
- Avoid spelling errors → make use of professional proofreading if necessary
- Adhere closely to the given format
- Readability: Make it easy to find the relevant aspects in the text, use figures, emphasise by formatting (heavy type), separate sections, use footnotes sparingly (just documentation, no important information), ...
- Do not overuse graphs etc.





# **General Advices**

- Avoid a manifold usage of external resources (links to websites)
- The beginning of your proposal must arouse curiosity and impression, the end must be a harmonious final chord → these two paragraphs are of special importance in any kind of text!
- Do not underestimate any category of a proposal with less value concerning the evaluation criteria → All parts of the proposal are important to be successful
- Do not write a technical report tell a story, sell a story
- Submit early enough
- Do not hesitate to contact your EU Liaison Office and the National Contact Point





#### **National Contact Point Mobility – Contacts**

**Astrid Schwarzenberger** 

**Felix Beckendorf** 

Astrid.Schwarzenberger@dlr.de 0228 / 3821 1659

Felix.Beckendorf@dlr.de 0228 / 3821 1653

Liane Lewerentz (Schwerpunkt: rechtliche und finanzielle Fragen) Liane.Lewerentz@dlr.de 0228 / 3821 1652



Thanks for your attention!