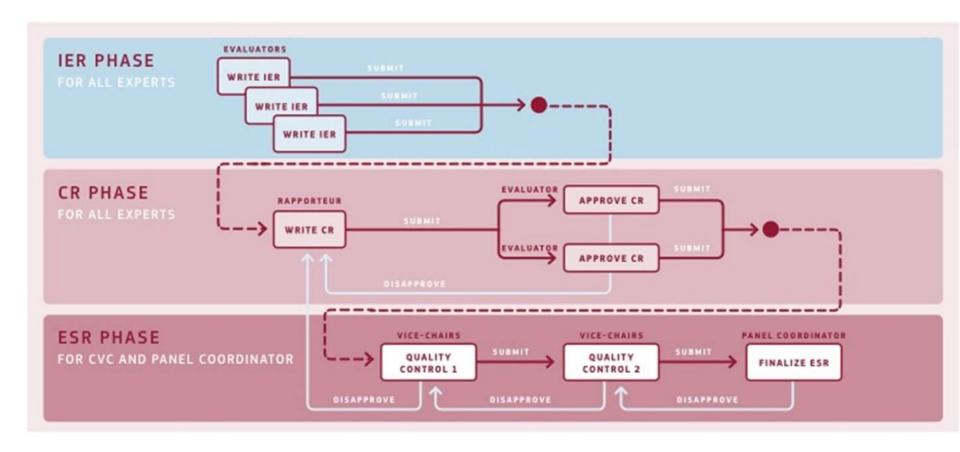


Feedback from reading CVs and abstracts

Michal Straka

Institute of Organic Chemistry and Biochemistry, Academy of Sciences of Czech Republic, Prague

Evaluation procedure



CVs FROM GUIDE

- Professional experience (reverse chronological order)
- Education (reverse chronological order)
- Publications, monographs
- Granted patent(s)
- Conferences, Invited presentations ...research expeditions
- Organisation of international conferences in your field(s) of research
- Examples of participation in industrial innovation
- Prizes and Awards
- Funding
- Supervising and mentoring activities

Reading your CVs: My observations

- Picture makes it warm and personal
- Good structure makes it readable
- Be specific. missing conference dates, underline your name in publications, say names of mentored students...
- When teaching, be specific
- Manuscripts in preparation: only if you are in luck of publications give details there
- Not needed nor impressive: present grant proposals, too personal info, too distant functions, such as holiday consultant...grants as a team member

Reading your CVs: My observations

- Bold, italic, underline, bullets, color and structure makes it readable
- Note that (2019) guide wanted some dates exact and want number of citations with papers.
- Highlight what makes you different and better than others
 - single-author, high-impact, or prized articles, covers, best quoted...
 - special awards, funding, patents, outreach
 - special functions, community services, when PI
- Emphasize your achievements, shortly
- Document independent thinking
 - typical problem

Reading the abstracts

- Abstract = clear & concise version of the proposal
- Good abstract has a story to read
- Should be understood by general audience in the field
- One justified paragraph, decent language, concise, comprehensive.
- Avoid: jargon, too many abbreviations, references

You want to catch the reader: Make it a story

- General Exposition (one sentence)
 - Nail the topic/problem fast
 - Explain your aim/hypothesis/idea
 - How will you arrive at solution/results
 - Results and how it makes the world better (one sentence)

Applicants' on-line workshop on MSCA Postdoctoral Fellowships, 24/06/2021 Technologické centrum AV ČR

Marie Curie Fellowship: Story behind Successful Application



Adam Pecina

Molecular Modeling and Drug Discovery Lab Italian Institute of Technology, Genoa, Italy

adam.pecina@iit.it









Adam Pecina

Marie Skłodowska-Curie Researcher

• Italian Institute of Technology, Via Morego 30, Genoa, 161 63, Italy

ResearcherID: K-2304-2012 | ORCID: 0000-0003-3890-7831







EDUCATION

2016 **PhD.** (Computational chemistry) at Charles University in Prague, Czech Republic

2016 RNDr. (Computational chemistry) at Charles University in Prague

2009 MSc. (Biophysical chemistry) at Palacký University in Olomouc, Czech Republic

2007 **BSc.** (Applied chemistry) at Palacký University in Olomouc, Czech Republic





PROFFESIONAL EXPERIENCE

2019 – 2021 Marie Curie Fellow at IIT, Genova, Italy (Dr. Marco De Vivo)

2018 – 2019 **Postdoc.** at IIT, Genova, Italy (Dr. Marco De Vivo)

2016 – 2017 **Postdoc.** at IOCB CAS, Prague, Czech Republic (Prof. Pavel Hobza)

9 – 12, 2010 Visiting Researcher at POSTECH, Pohang, Republic of Korea (Prof. Kwang Soo Kim)

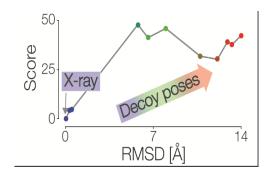
2008 – 2016 Research Assistant at IOCB CAS, Prague, Czech Republic (Prof. Pavel Hobza)



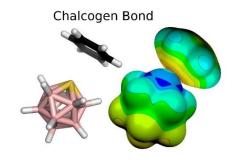


My Research Interest

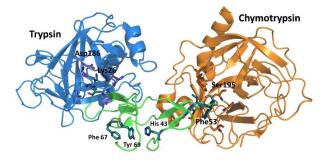
High-level QM, DFT and semiempirical methods, QM/MM approach, docking/scoring algorithms, MD simulations, enhanced sampling methods, FEP



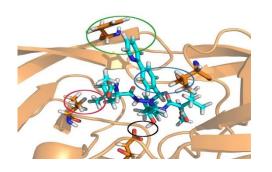
III. Virtual screeningSQM/COSMO score



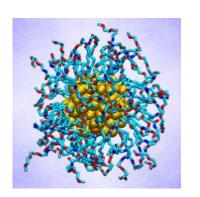
I. Non-covalent interactions



IV. Protein-Protein interactions



II. Protein-Ligand complexes



V. Functionalized
Gold Nanoparticles
with enzyme-like
properties

Why to apply for Fellowship (Marie-Curie)?

"General" Motivation

- (3) prestigue
- **broaden your horizons**
- **broaden your expertise**
- **b** obtain new skills
- **language** obtain new competences
- expand your network
- **become independent researcher**

"Real-time" Motivation

- own/only funding for postdoc
- (3) own/new project
- **b** obtain new skills
- **b** obtain new competences
- (3) make your own network
- get access to starting grants
- **(3)** cover whole family

My first steps:

- Defined short and long-term career goals
 (academia/basic research/industry, PI/professor/technician, research/teaching, ...)
- Identified strengths but also gaps in training (which I want to fill during fellowship)

 (QM expertise, noncovalent interactions, proteins; MD techniques, project managing, public engagement)
- Chosen destination that matches all my and my family needs (quality of life, language barrier, real salary vs. daily expanses, partner's career possibilities, distance from home, childcare system, ...)
- Found best institutions and groups in my field
- Checked activity/history/structure of the group (publications, alumni, diversity of projects, funds received), working environment (e.g. the "company" culture)

My Journey to MSCA-IF Fellowship:

- **2015**: 1st contact with PI (during the conference)
- **2016**: PhD defense, 1st Marie Curie (MSCA-IF) proposal written (6 months) and submitted; 1st wife, 1st postdoc position (IOCB Prague)
- **2017**: 1st MSCA proposal rejected (score **81**.0%), 6 PIs contacted (2 no response, 4 interviews/4 grant proposal inquiries), 1st child born, 2nd MSCA proposal submitted, MSCA CZ grant of MŠMT approved (but waived), 2nd MSCA-IF proposal submitted
- 2018 2-years postdoc position at IIT (granted by the internal funds), 2nd MSCA proposal rejected (score around 87.2%), the Seal of Excellence fellowship for 2 years, 3rd MSCA proposal submitted
- 2019 3rd MSCA proposal successful (score of 96.8%): MSCA-IF Fellowship for 2 years

General Recommendations:

- Start as soon as possible (~2 years prior defense)
- Be prepared to leave your comfort zone
- Don't be afraid of "big" names and challenging topics
- Update your CV, customize your proposal
- Be visible (upgrade your LinkedIn profile, Google Scholar, ResearchGate)
- Be in touch with the community (Twitter)
- Contact the PI as soon as possible (to get details about planned vacancies, where to apply for funding, discuss the project in detail)
- Read and write, read, and read a lot!
- Contact your PhD supervisor/future PI/project office managers/mentors for any advice

What makes a difference?

aluck!!!!
and

Quality of You/Supervisor/Host

PhD

Charles University + IOCB, Prague

- Training, international experiences
- Awards/Grants
- 10 publications

Mar 2016 - Dec 2017

1st Postdoctoral (IOCB, Pavel Hobza)

- 4 publications, invited talks

Jan 2018 - May 2019

Postdoctoral Fellow at IIT (Marco De Vivo)

- = host institution, preliminary results
- Seal of Excellence
- other grants (CPU time)



Established in 1953

Central labs (49 scientific groups)

+ 800 employees (191 PhD students)

32 nationalities

60M USD income from licenses

10 patents/year, 3 spin-offs (8 in incubator)



Established in 2006

Central labs + 11 research centers in Italy + 2 abroad (MIT)

+1700 employees (697 PhD students; 42%women)

50% from abroad (60 nationalities), average age 36y

340M EUR from external resources, 80M EUR income from licenses

200 EU projects, 50 ERC, +1000 patents, 24 start-ups

Dr. Marco De Vivo

- expertise, experience, track-record quality, grants, awards
- novelty of proposed project, matching expertise of both!

MSCA proposal Recommendations:

1. Excellence:

- Improve the level of innovation of the project (state-of-art, gap in knowledge, nwell defined objectives, novel strategy/new techniques) and interdisciplinarity
- Very detailed project strategy (do not use generic objectives, be specific, rationalize all aspects (e.g. used models/experiments)
- Customize training plan (identify all strengths and weaknesses, find options in host (grant writing, project management, supervision, hard/soft skills always interconnect text with CV)
- Highlight quality of supervisor experience with grants, team: PhDs, postdocs, field of expertise;
 network, advisors; quality of host institution in EU related topics (grant management, Code of Conduct, Innovation; important Offices)
- in "potential to reach maturity during the project": highlight best parts of your CV and be specific how MSCA project will enhance your status quo!
- Use Figures/schemes
- 50% of all points: quality of the project is not the only factor; do not underestimate any sub-section;
 follow precisely Guide (find keywords, whole sentences, ..)

MSCA proposal Recommendations:

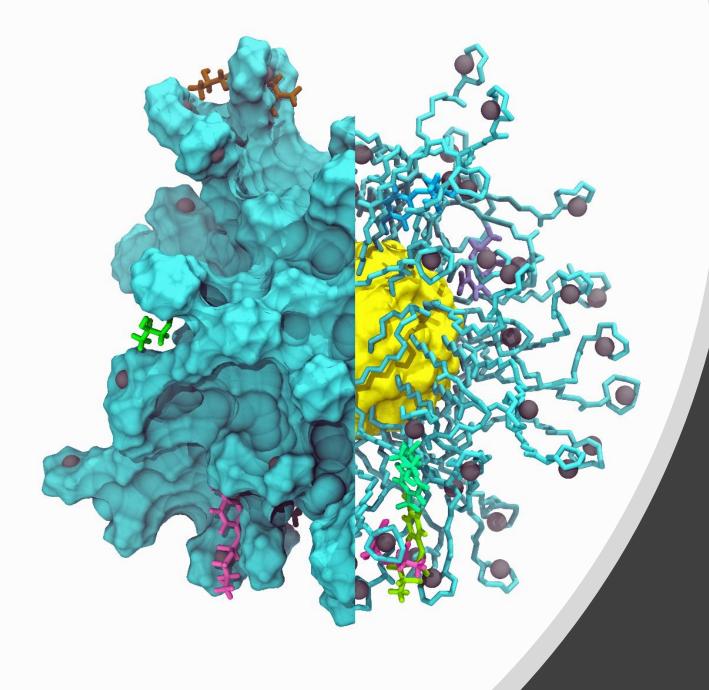
2. Impact:

- Be specific how it will help you in future highlight again achieved trainings and how it will help you in future to achieve your long-term goal (e.g. as a PI in the field working on related topics).
- Be specific in Dissemination (try to plan/find the most relevant events), ! Keywords (e.g. data management plan); try to find relevance in European scale (if project successful.... It will impact whole field of...); socieoecenomic impact, etc
- Communication activity strategy should be customized by the audience and means of communication;
 KEYWORDS

MSCA proposal Recommendations:

3. Implementation:

- Go to details. Each project objective should have clear definition with several workpackages and individual tasks and milestones within; each deliverable/publication should be clearly interconnected with main milestones.
- Include training from part 1 and be specific.
- Do not forget to plan Dissemination and Communication activities
- Estimate the time for each activity. Try to interconnect all tasks and milestones; secondments and training.
- Proper allocation of PERSONS (who will do what!), technical resources (e.g experiments, computational time in my case)
- Identify all risks, connect them with specific WP/task and try to give the alternative solution
- Describe project management scheme meetings with PI, Host offices, collaborators
- Infrastructure in detail lab, equipment, access to databases, hardware/software, Offices (HRO, TTO, ..)

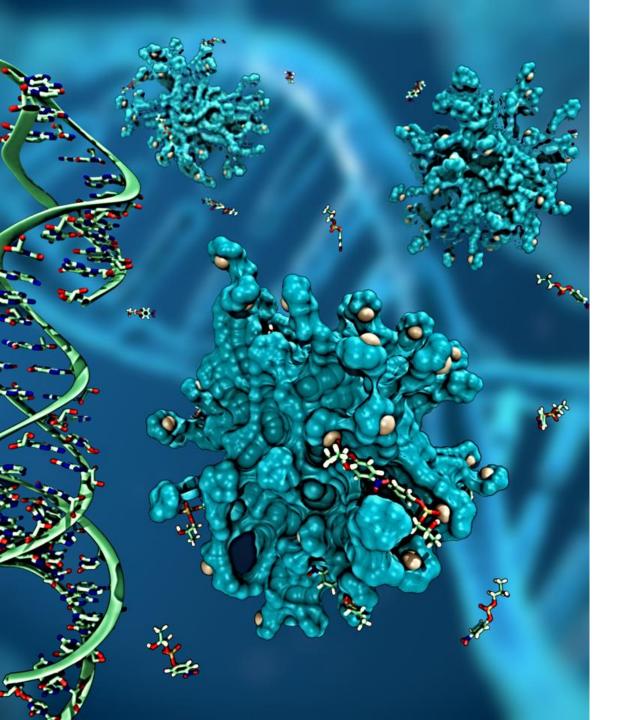


CompNanozymes:

Toward Metal-Dependent Catalysis of Nanozymes

The project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement no. 843117.





"CompNanozyme" project conclusions:

Nucleic Acid Processing NANOZYMES:

1. Catalytic efficiency can be finely regulated by the exact structure and dynamics of coating ligands

- 2. Efficient nanonucleases form (bi)metal-aided precatalytic sites
- 3. Parallelism with enzymes (low polarity environment, two-metal-ion mechanism)

Publications:

- 1. Czescik et al., Angewandte Chemie Int Ed **2021**, 60, 1423.
- 2. Pecina et al., ACS Catalysis **2021**, just accepted.

Bonus/Malus of MSCA IF project

- Extensive training
- Own funding
- Challenging project (international collaboration, interdisciplinary)
- State-of-the-art techniques
- Supported work-life balance
- MSCAA alumni network
- No join projects with other postdocs/PhD students within the group
- 100% working time devoted to the MSCA project

Too challenging projects together with necessity of acquiring new techniques can result in no output (for 1-2 years) and can impact one's future career even though the fellowship is one of the most prestigious ones.

Acknowledgement









The "CompNanozymes" project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement no. 843117.

Good Luck!!!!





Weaknesses that kill the proposals

Michal Straka

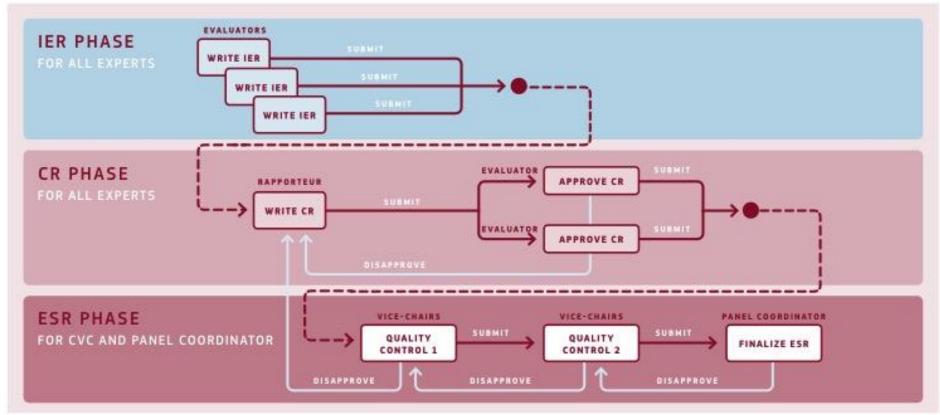
Institute of Organic Chemistry and Biochemistry, Academy of Sciences of Czech Republic, Prague

Do you want to get funded?

- Do excellent science
 - often only part of the project is innovative
 - you can do innovative objectives by innovative methodology and bring innovative applications
- Take every opportunity to improve CV
 - not just papers...mentoring, funding, independence..

- Think who reads your proposal
 - only one is usually and expert in the field

Evaluation Procedure



The pool of experts is mixture of: academics, engineers, SME, former scientists, managers, CEOs

Make your proposal clear and understable

Referees like

- Innovativeness
- Rich CV
 - be different, have something others don't
- Structure, story, clarity, figures, highlighting
 - overview of the action is great invention
- Avoid
 - Incremental or unfocused or me-too science
 - Technical/complicated/unstructured text
 - Too much of EU bullshit. Only very little is needed

Evaluation Criteria: What you see

Excellence	Impact	Quality and efficiency of the implementation	
Quality and pertinence of the project's research and innovation objectives (and the extent to which they are ambitious, and go beyond the state of the art)	Credibility of the measures to enhance the career perspectives and employability of the researcher and contribution to his/her skills development	Quality and effectiveness of the work plan, assessment of risks and appropriateness of the effort assigned to work packages	
Soundness of the proposed methodology (including interdisciplinary approaches, consideration of the gender dimension and other diversity aspects if relevant for the research project, and the quality of open science practices)	Suitability and quality of the measures to maximise expected outcomes and impacts, as set out in the dissemination and exploitation plan, including communication activities	Quality and capacity of the host institutions and participating organisations, including hosting arrangements	
Quality of the supervision , training and of the two-way transfer of knowledge between the researcher and the host	The magnitude and importance of the project's contribution to the expected scientific, societal and economic		
Quality and appropriateness of the researcher's professional experience, competences and skills	impacts		
50%	30%	20%	

Evaluation criteria: What I see

EXCELLENCE	1
Quality and credibility of the research/innovation project, level of novelty, appropriate consideration of inter/multidisciplinary and gender aspects	1.1
Are the state-of-the-art, specific objectives and an overview of the action provided and relevant?	1.1
Is the proposed research methodology and approach credible (in view of the type of research / innovation activities proposed)?	1.1
Is the planned research original and innovative? Will the action contribute to advance the state-of-the-art within the research field (i.e. new concepts, approaches or methods)?	1.1
Where applicable, are there interdisciplinary aspects to consider?	1.1
Where applicable, is the gender dimension in the research content well addressed in research activities where human beings are involved as subjects or end-users, or in research activities using e.g. animal models?	1.1
Quality and appropriateness of the training and of the two-way transfer of knowledge between the researcher and the host	1.2
Is the two-way transfer of knowledge between the researcher and the host institution outlined and credible?	1.2
For Global Fellowships only, does the proposal explain how the newly acquired skills and knowledge will be transferred back to Europe?	1.2
Are training activities described and relevant? [NOTE: do NOT penalize the proposal in case there is no Career Development Plan]	1.2
Quality of the supervision and of the integration in the team/institution	
Are the qualifications and experience of the supervisor well described and adequate, taking into account their level of experience on the research topic and their track record of work (e.g. main international collaborations, experience in supervising/training especially PhD, postdoctoral researchers)?	1.3
Do the hosting arrangements allow for a good integration of the researcher in the team/institution to maximize knowlegde and skills generated from the fellowship? Are the nature and the quality of the research group/environment as a whole outlined? Are international networking opportunities offered?	1.3
For Global Fellowships only, are the hosting arrangements for both outgoing and return phases adequate to accommodate the researcher?	1.3
Potential of the researcher to reach or re-enforce professional maturity/independence during the fellowship	1.4
Will the researcher's existing professional experience, talents and proposed research contribute to their development as an independent researcher during the fellowship?	1.4
Are the new competences and skills that will be acquired during the fellowship relevant to the researcher's profile? [NOTE: fellowships will be awarded to the most talented researchers, as shown by the proposed research and their overall track record in relation to their level of experience.]	1.4

Read guide for evaluators, too. Give them answers in the proposal.

All criteria must be excellent to get funding

Evaluation Criterion	Threshold	Weight	Priority if ex-aequo
Excellence	n/a	50%	1
I m pact	n/a	30%	2
Implementation	n/a	20%	3
Total	70%		

$$0.5*4.8 + 0.3*4.8 + 0.2*2.5 = 89\%$$

 $0.5*4.7 + 0.3*4.7 + 0.2*4.7 = 94\%$

PK=Proposal Killer One:

Impact and Implementation are often underestimated, hence poorly scored

Criterion Excellence: Be innovative

- strong proposal killer (PK): Innovativeness vs state-ofthe-art must be clearly explained
 - The best ones develop innovative methods to do innovative,
 e.g. materials, to bring innovative applications.

Gender: Not a killer, yet:

 It is not about gender equality promises, like "I will preferably hire females"

Instead, think how you can exploit your project to promote gender equality in science

Transfer of knowledge. Strong PK.

- ToK is killer No.1 as it is the purpose of MC grants
- sub-PKs: secondary skills, ToK overlap, supervisor's quality
 - <u>secondary skills</u> training <u>is</u> important, e.g. table
 - two-way ToK : must be orthogonal & complementary
 - global proposals must impress with the new expertise to be brought to EU
 - document well supervisors' scientific success (1/4-1/2 of page)

Yes, we do kill proposals on seeming details

The CV and subcriterion 1.4

Strong PK: Poor or unbalanced CV. Examples:

- technician many papers but in the middle of authorlist usually lacks independence and innovative thinking
- publication machine but may lack other aspects than publications and conferences
- teacher many students mentored but publication outcome weak

Solutions

- highlighting of important makes even poorer CV look better
- actively search and participate in other aspects of CV, see my feedback on CV, be active, collaborative, serve community, inform public, here you can be inventive also
- try to show <u>independent thinking some other ways</u>, describe a paragraph or two with your ideas/independent work/ leadership/ activity /achievements

Impact: Career perspectives

- What opportunities fellowship brings after the fellowship?
- strong PK: People don't know what to write and referees have very different views on this
 - Show you will be strongly qualified for independence after the fellowship. Describe visions for, e.g., habilitation, building own group, leadership qualities, plans, perspectives.
 - Explain how the planned training, also secondary skills, improves your career prospects.

Dissemination. Exploitation. Outreach

- intermediate killers: Generic description of dissemination, exploitation and outreach activities
- Which exactly journals and conferences?
- How will you patent?
- Who will utilize your results?
- Be specific with public actions, outreach activities. Invent your own actions, not just joining the Researcher's night. Everybody does.
- All actions put in Gantt chart

Implementation: Work plan

- mild PK: Missing clearly specified actions deliverables control points aka milestones, overlaps, overchallenged timing.
- Gant chart compulsory: All actions should be in
- Example: Proposal "We will do new kind of a computer"
 - Objective 1: Working prototype; O2: Applications O3: Sell it
 - Work package 1:
 - Deliverable 1.1 Prototype, Deliverable 1.2 Operating system,
 Deliverable 1.3 Patent 1.4 Paper about it
 - Milestone 1.1.1 Assembled motherboard, 1.1.2 Assembled prototype, 1.1.3 Paper 1 accepted; 1.2.1 Operating system written, 1.2.2 OS stable 1.2.3 Paper 2 on OS accepted
 - Method: Buy/produce components, assemble, write up operating system in C, install it...

Management

- PK: Poor risk management & contingency plan
 - Often underestimated by PI. Used by some referees to kill
 - Do travel to the future in your mind and think of possible failures and how you would react, e.g.
 - If some parts for you computer are not on the market, this and this guy/company can provide them in reasonable time
 - if you operating systems is slow, this and that solution will speed it up
 - if people don't buy your computers, how you will make them to do so
- Management procedures
 - how the project will be managed, monitored, controlled, also in case of problem, who takes care of what (science, administration, money), regularly meetings, control points, reports, discussions..

ISNT IT BORING? IT IS BUT I HAVE TO EVALUATE IT....sorry

Infrastructures

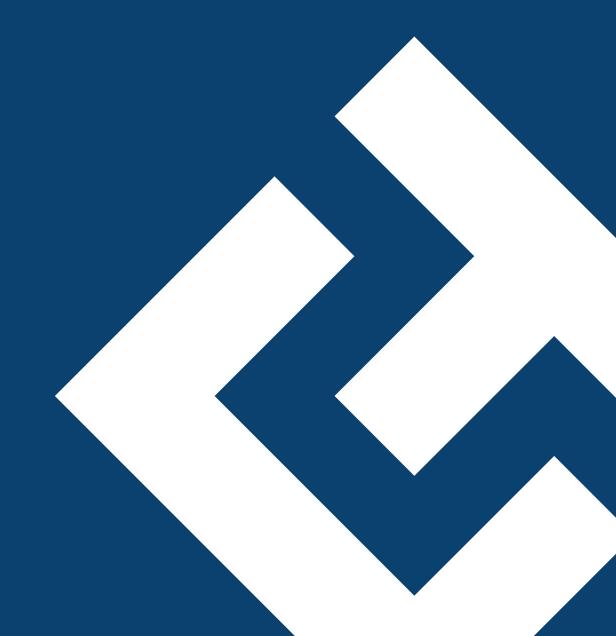
Clearly describe infrastructures

- Not a killer but takes points, for example, when contribution of beneficiary (how much supervisor spends on it) is not said.
- Infrastructures is not only the devices and computers but also surroundings, proximity of some special device (synchrotron), proximity of experts and so on



Applicants' on-line workshop on MSCA Postdoctoral Fellowships

Zuzana Čapková, MSCA and ERC NCP 24 June 2021



NETIQUETTE

Keep your microphone off when not interacting with us.

If you want to ask a question, "raise your hand" or let us know via chat.

Those who have selected this workshop in the registration form will participate actively.

During breakout sessions, you will work in groups, turn on your microphone and keep your camera on.

Those who have not selected this workshop in the registration form can watch us (participate passively).

With more specific questions, do not hesitate to contact me (capkova@tc.cz).



24 JUNE - MORNING SESSION

(CHEMISTRY, INFORMATION SCIENCE AND ENGINEERING, MATHEMATICS, PHYSICS)

Introduction

Zuzana Čapková, MSCA NCP, Technology Centre CAS

Feedback from the evaluator on CVs and abstracts, panel specificities

Michal Straka, Institute of Organic Chemistry and Biochemistry of the CAS

Interactive part: evaluating a MSCA proposal

Zuzana Čapková, Technology Centre CAS
Petra Fedorová, Technology Centre CAS
Ilona Skordis Gottwaldová, Institute of Physics CAS
Klára Sobotíková, Charles University
Ludmila Součková, Charles University
Petra Vaculíková, Palacký University Olomouc

MSCA grant holder – success story

Adam Pecina, Istituto Italiano di Tecnologia, project CompNanozymes (CHE, 2018)

Discussion





Introduction

Objectives:

- To learn how to prepare a competitive CV and abstract
- To get familiar with award criteria under Horizon Europe
- To be advised by/discuss potential issues with a MSCA fellow (a successful applicant)

Key sources of information:

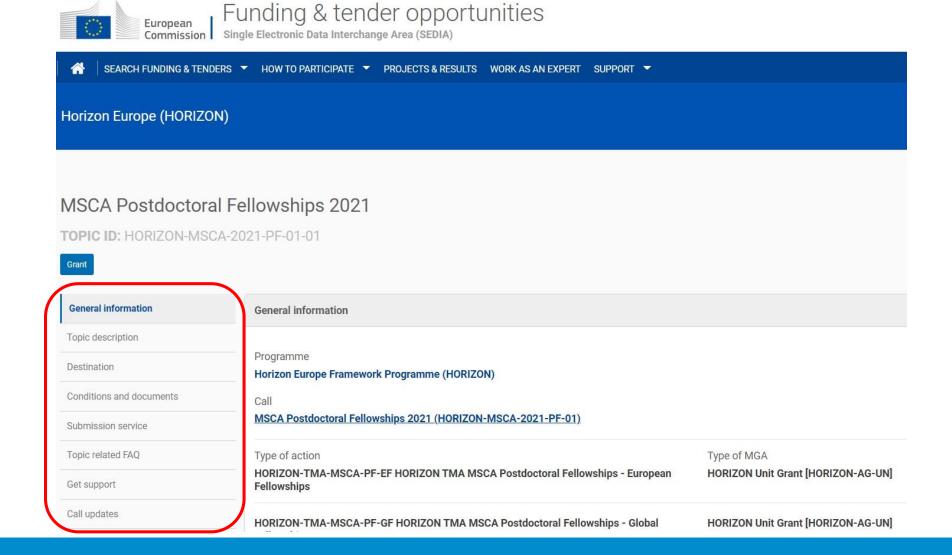
- Work Programme 2021-2022 (published on 15 June)
- Webpage of the Call MSCA-PF-2021 (opened on 22 June)
- Presentations and recording from the <u>Information day on</u> <u>MSCA PF</u> (held on 21 May)

National support to MSCA applicants in 2021:

- 21 May: Information Day on MSCA Postdoctoral Fellowships
- 24-25 June: Applicants on-line workshop on MSCA Postdoctoral Fellowships
- <u>15 September:</u> Pre-screening



FUNDING & TENDER OPPORTUNITIES PORTAL





PROPOSAL SUBMISSION

Part A: use of submission wizard (same principle as H2020)

Researcher information:

- PhD award date only, no other qualification fields available
- Residency and activity table : same principle as H2020
- Table for extensions on the 8-year post PhD limit number of days/category only, beneficiary to keep relevant records

Beneficiary information:

- PIC based: same principle as H2020
- Non-academic placement host and secondment host
- Gender Equality Plan

Budget:

- Family allowance (selection box as H2020)
- Long term leave allowance and special needs allowance (not visible in proposal as cannot be requested at that stage)



PROPOSAL SUBMISSION

- Ethics self-assessment
- Security self-assessment (corporate approach)
- Call specific questions (non-exhaustive)
 - Euratom: applicant to confirm if they qualify for the Euratom topics/conditions
 - ERA Fellowships: applicant to confirm if they wish to be considered for ERA call (question appears based on qualifying PIC country)
 - Secondment information
 - Optional non academic placement information

Keywords are updated for HE

 main principle remains: KW's 1, 2 mandatory and of selected scientific panel, KW 3 mandatory and of any panel, KW's 4 and 5 optional and of any panel

Resubmissions

 question will appear in the forms, however resubmission restrictions do not apply for HE-MSCA-PF-2021 call



PROPOSAL SUBMISSION

- Part B-1 is strictly restricted to 10 pages:
 - => a cover page, table of contents, ...on page 1, 2, will count towards the page limit and automatically result in excess pages that cannot be evaluated
 - => the Part B-1 should start with "1. Excellence" (instructions, definitions to be deleted before submission)
- Part B-2 (no page restriction):
 - Researcher's CV
 - Letters of commitment (host for outgoing phase of GF or non-academic placement host)
 - Participating organisations (max 1 page for beneficiary, max ½ page others)
 - Ethics & Security (additional info, if needed)



Proposal structure*

Part A - administrative forms

Part B – the proposal

Part A (electronically)

General Information about the Proposal including Abstract (max. 2 000 characters), Administrative data on participating organisations, Budget, Ethics issues table, Call specific questions

Part B1 (PDF upload)

- Excellence
- Impact
- Implementation
- 10 pages total
- No section page limit
- excess pages will automatically be disregarded

Part B2 (PDF upload)

No overall page limit applied

- CV (indicative length: 5 pages)
- Capacities of the participating organisations
- Ethical aspects
- Letter of commitment



^{*} to be checked when the template for MSCA Postdoctoral Fellowships is available

MSCA INDIVIDUAL FELLOWSHIP PROPOSAL:

EXCELLENCE (50%)

Quality and credibility of the research/innovation project; level of novelty, appropriate consideration of inter/multidisciplinary and gender aspects

Quality and appropriateness of the training and of the two way **transfer of knowledge** between the researcher and the host

Quality of the supervision and of the integration in the team/institution

Potential of the researcher to reach or re-enforce a position of professional maturity/independence during the fellowship

Your tasks

- Individual work: read the Excellence Part of the proposal
- You will be transferred to breakout rooms, you need to accept by clicking on "JOIN NOW"
- Group work: discuss your thoughts and write them down
 - What are the strengths?
 - What are the weaknesses?

5 = excellent, 0 = fails to address the criterion

- Come up with a score for this section
- → plenary discussion



SCORING

- 0 Proposal fails to address the criterion or cannot be assessed due to missing or incomplete information.
- 1 Poor. The criterion is inadequately addressed, or there are serious inherent weaknesses.
- 2 Fair. Proposal broadly addresses the criterion, but there are significant weaknesses.
- 3 Good. Proposal addresses the criterion well, but a number of shortcomings are present.
- 4 Very Good. Proposal addresses the criterion very well, but a small number of shortcomings are present.
- 5 Excellent. Proposal successfully addresses all relevant aspects of the criterion. Any shortcomings are minor.



MSCA FELLOW'S COMMENTS/RECOMMENDATIONS:

1. Excellence:

- Improve the level of innovation of the project (state-of-art, gap in knowledge, well defined objectives, novel strategy/new techniques) and interdisciplinarity
- Very detailed project strategy (do not use generic objectives, be specific, rationalize all aspects (e.g. used models/experiments)
- Customize training plan (identify all strengths and weaknesses, find options in host (grant writing, project management, supervision, hard/soft skills always interconnect text with CV)
- Highlight quality of supervisor experience with grants, team: PhDs, postdocs, field of expertise; network, advisors; quality of host institution in EU related topics (grant management, Code of Conduct, Innovation; important Offices)
- in "potential to reach maturity during the project": highlight best parts of your CV and be specific how MSCA project will enhance your status quo!
- Use Figures/schemes
- 50% of all points: quality of the project is not the only factor; do not underestimate any sub-section; follow precisely Guide (find keywords, whole sentences, ..)



Excellence

Horizon 2020

- Quality and credibility of the research/innovation project; level of novelty, appropriate consideration of inter/multidisciplinary and gender aspects.
- Quality and appropriateness of the training and of the two way transfer of knowledge between the researcher and the host.
- Quality of the supervision and of the integration in the team/institution.
- Potential of the researcher to reach or re-enforce professional maturity/independence <u>during the</u> <u>fellowship</u>.

Horizon Europe

- Quality and pertinence of the project's research and innovation objectives (and the extent to which they are ambitious, and go beyond the state of the art).
- Soundness of the proposed methodology (including interdisciplinary approaches, consideration of the gender dimension and other diversity aspects if relevant for the research project, and the quality of open science practices).
- Quality of the supervision, training and of the two-way transfer of knowledge between the researcher and the host.
- Quality and appropriateness of the researcher's professional experience, competences and skills.



1.1 Quality and pertinence of the project's research and innovation objectives (and the extent to which they are ambitious, and go beyond the state of the art)

At a minimum, address the following aspects:

- Describe the quality and pertinence of the R&I objectives; are the objectives measurable and verifiable? Are they realistically achievable?
- Describe how your project goes beyond the state-of-the-art, and the extent to which the proposed work is ambitious.

IMPORTANT

- ✓ Formulate an overarching aim of your project
- ✓ Fine-tune the general goal through specific objective/aims/research questions
- ✓ Ensure a good state of the art, focus on your topic
- ✓ Original, ambitious but also feasible!



1.2 Soundness of the proposed methodology (including interdisciplinary approaches, consideration of the gender dimension and other diversity aspects if relevant for the research project, and the quality of open science practices including sharing and management of research outputs and engagement of citizens, civil society and end users, where appropriate)

- At a minimum, address the following aspects:
- Overall methodology: Describe and explain the overall methodology, including the concepts, models and assumptions
 that underpin your work. Explain how this will enable you to deliver your project's objectives. Refer to any important
 challenges you may have identified in the chosen methodology and how you intend to overcome them.
- Integration of methods and disciplines to pursue the objectives: Explain how expertise and methods from different disciplines will be brought together and integrated in pursuit of your objectives. If you consider that an inter-disciplinary approach is unnecessary in the context of the proposed work, please provide a justification.
- <u>Gender dimension and other diversity aspects</u>: Describe how the gender dimension and other diversity aspects are taken into account in the project's research and innovation content. If you do not consider such a gender dimension to be relevant in your project, please provide a justification.
 - Remember that this question relates to the <u>content</u> of the planned research and innovation activities, and not to gender balance in the teams in charge of carrying out the project.
 - Sex, gender and diversity analysis refers to biological characteristics and social/cultural factors respectively. For
 guidance on methods of sex / gender analysis and the issues to be taken into account, please refer to this page.



1.2 Soundness of the proposed methodology (...)

- Open science practices: Describe how appropriate open science practices are implemented as an integral part of the proposed methodology. Show how the choice of practices and their implementation is adapted to the nature of your work in a way that will increase the chances of the project delivering on its objectives [e.g. up to 1/2 page, including research data management]. If you believe that none of these practices are appropriate for your project, please provide a justification here.
- Research data management and management of other research outputs: Applicants generating/collecting data and/or other research outputs (except for publications) during the project must explain how the data will be managed in line with the FAIR principles (Findable, Accessible, Interoperable, Reusable).

IMPORTANT

- ✓ Prepare your proposal in compliance with the principles of Open Science, Responsible Research & Innovation
- ✓ New publishing platform and open peer review: https://open-research-europe.ec.europa.eu/



1.3 Quality of the supervision, training and of the two-way transfer of knowledge between the researcher and the host

At a minimum, address the following aspects:

- Describe the qualifications and experience of the supervisor(s). Provide information regarding the supervisors' level of experience on the research topic proposed and their track record of work, including main international collaborations, as well as the level of experience in supervising/training, especially at advanced level (i.e. PhD and postdoctoral researchers).
- Planned training activities for the researcher (scientific aspects, management/organisation, horizontal and key transferrable skills...).
- For European Fellowships: two-way transfer of knowledge between the researcher and host organisation.
- For Global Fellowships: three-way transfer of knowledge between the researcher, host organisation, and associated partner for outgoing phase.
- Rationale and added-value of the non-academic placement (if applicable).



Examples of advanced research skills:

- Training in new techniques, instruments, equipments..
- Open Science
- Big data
- Scientific writing
- Experimental design
- Quantitative and Qualitative methods
- User design....

Examples taken from the MSCA IF Handbook 2020 (Net4mobility+ project)

Examples of Transferable Skills:

- Entrepreneurship and innovation
- Grant writing
- Patent applications
- IPR Management and Patenting
- Leadership / Influencing courses
- Project Management
- Gender training (gender isues / gender innovation)
- Presentation Skills
- Communication training of research to nonspecialists
- Ethics in Research (RRI)
- CV presentation, interview skills....



1.3 Quality of the supervision, training and of the two-way transfer of knowledge between the researcher and the host

IMPORTANT

- ✓ Demonstrate that the supervisors are experts in their areas (include track record and international collaborations, experience in supervising/training especially at advanced level (PhD, postdoctoral researchers), participation in projects, publications, patents, etc.)
- ✓ Explain the training objectives (list them, make a table, timing, duration...)
- ✓ Indicate the activities to be carried out during secondments (if any)
- ✓ Include the preparation and use of a **Personal Career Development Plan (PCDP)**: must be submitted at the beginning of the project (no later than 6 months after its start) and updated if needed throughout the project)
- √ See MSCA guidelines on supervision



1.4 Quality and appropriateness of the researcher's professional experience, competences and skills

 Discuss the quality and appropriateness of the researcher's existing professional experience in relation to the proposed research project.

IMPORTANT

- ✓ Include all the relevant experience (teaching, consultancy, supervision, etc.): show your leadership /independent thinking skills...
- ✓ Evaluators have to be convinced that you are the right person to carry out the activities planned and you will still gain new skills/knowledge
- ✓ This section needs to be coherent with your CV



SHORT BREAK





MSCA INDIVIDUAL FELLOWSHIP PROPOSAL:

IMPACT (30%)

Enhancing the future career prospects of the researcher after the fellowship

Quality of the proposed measures to exploit and **disseminate** the project results

Quality of the proposed measures to **communicate** the project activities to different target audiences

Your tasks

- Individual work: read the Impact Part of the proposal
- You will be transferred to breakout rooms, you need to accept by clicking on "JOIN NOW"
- Group work: discuss your thoughts and write them down
 - What are the strengths?
 - What are the weaknesses?

5 = excellent, 0 = fails to address the criterion

- Come up with a score for this section
- → plenary discussion



MSCA FELLOW'S COMMENTS/RECOMMENDATIONS:

2. Impact:

- Be specific how it will help you in future highlight again achieved trainings and how it will help you in future to achieve your long-term goal (e.g. as a PI in the field working on related topics).
- Be specific in Dissemination (try to plan/find the most relevant events), ! Keywords (e.g. data management plan); try to find relevance in European scale (if project successful.... It will impact whole field of...); socieoecenomic impact, etc
- Communication activity strategy should be customized by the audience and means of communication;
 KEYWORDS



Impact

Horizon 2020

- Enhancing the future career prospects of the researcher <u>after the fellowship</u>.
- Quality of the proposed measures to exploit and disseminate the project results.
- Quality of the proposed measures to communicate the project activities to different target audiences.

Horizon Europe

- Credibility of the measures to enhance the career perspectives and employability of the researcher and contribution to his/her skills development.
- Suitability and quality of the measures to maximise expected outcomes and impacts, as set out in the dissemination and exploitation plan, including communication activities (to be submitted towards the end of the project).
- The magnitude and importance of the project's contribution to the expected scientific, societal and economic impacts.



2.1 Credibility of the measures to enhance the career perspectives and employability of the researcher and contribution to his/her skills development

At a minimum, address the following aspects:

- Expected skill development of the researcher.
- **Expected** impact of the proposed research and training activities on the researcher's career perspectives inside and/or outside academia.

IMPORTANT

- ✓ Present the way in which the fellowship will contribute in the medium and long term to the development of your career.
- ✓ How the training received will help broaden diversify your career and skillset.
- ✓ What's the next step in your career and what you will learn in the PF to get there.



2.2 Suitability and quality of the measures to maximise expected outcomes and impacts, as set out in the dissemination and exploitation plan, including communication activities (to be submitted towards the end of the project)

What are the audiences we are addressing our messages to?

- Scientific Community
- Stakeholders
- Policy makers
- Final Users
- Industry...

General Public / Society

DISSEMINATION EXPLOITATION

(papers at conferences, publications in journals, open data...)

COMMUNICATION OUTREACH

(press articles, researchers 'night, blogs and videos...)



2.2 Suitability and quality of the measures to maximise expected outcomes and impacts, as set out in the dissemination and exploitation plan, including communication activities (to be submitted towards the end of the project)

At a minimum, address the following aspects:

- Plan for the dissemination and exploitation activities, including communication activities: Describe the planned measures to maximize the impact of your project by providing a first version of your 'plan for the dissemination and exploitation including communication activities'. Describe the dissemination, exploitation measures that are planned, and the target group(s) addressed (e.g. scientific community, end users, financial actors, public at large). Regarding communication measures and public engagement strategy, the aim is to inform and reach out to society and show the activities performed, and the use and the benefits the project will have for citizens. Activities must be strategically planned, with clear objectives, start at the outset and continue through the lifetime of the project. The description of the communication activities needs to state the main messages as well as the tools and channels that will be used to reach out to each of the chosen target groups. In case your proposal is selected for funding, a more detailed Dissemination and Exploitation plan will need to be provided as a mandatory project deliverable during project implementation
- <u>Strategy for the management of intellectual property, foreseen protection measures</u>: if relevant, discuss the strategy for the management of intellectual property, foreseen protection measures, such as patents, design rights, copyright, trade secrets, etc., and how these would be used to support exploitation.



2.3 The magnitude and importance of the project's contribution to the expected scientific, societal and economic impacts

- Provide a narrative explaining how the project's results are expected to make a difference in terms of impact, beyond the immediate scope and duration of the project. The narrative should include the components below, tailored to your project.
- Be specific, referring to the effects of your project, and not R&I in general in this field. State the target groups
 that would benefit.
- <u>Expected scientific impact(s)</u>: e.g. contributing to specific scientific advances, across and within disciplines, creating new knowledge, reinforcing scientific equipment and instruments, computing systems (i.e. research infrastructures);
- <u>Expected economic/technological impact(s)</u>: e.g. bringing new products, services, business processes to the market, increasing efficiency, decreasing costs, increasing profits, contributing to standards' setting, etc.
- Expected societal impact(s): e.g. decreasing CO2 emissions, decreasing avoidable mortality, improving policies and decision-making, raising consumer awareness.
- Only include such outcomes and impacts where your project would make a significant and direct contribution. Avoid describing very tenuous links to wider impacts.



2.3 The magnitude and importance of the project's contribution to the expected scientific, societal and economic impacts

• Give an indication of the magnitude and importance of the project's contribution to the expected outcomes and impacts, should the project be successful. Provide quantified estimates where possible and meaningful. 'Magnitude' refers to how widespread the outcomes and impacts are likely to be. For example, in terms of the size of the target group, or the proportion of that group, that should benefit over time; 'Importance' refers to the value of those benefits. For example, number of additional healthy life years; efficiency savings in energy supply.



MSCA INDIVIDUAL FELLOWSHIP PROPOSAL:

QUALITY AND EFFICIENCY OF THE IMPLEMENTATION (20%)

Coherence and effectiveness of the work plan, including appropriateness of the allocation of tasks and resources

Appropriateness of the **management structure and procedures**, including risk management

Appropriateness of the **institutional environment** (infrastructure)

Your tasks

- Individual work: read the Implementation Part of the proposal
- You will be transferred to breakout rooms, you need to accept by clicking on "JOIN NOW"
- Group work: discuss your thoughts and write them down
 - What are the strengths?
 - What are the weaknesses?

5 = excellent, 0 = fails to address the criterion

 Come up with a score for this section → plenary discussion



MSCA FELLOW'S COMMENTS/RECOMMENDATIONS:

3. Implementation:

- Go to details. Each project objective should have clear definition with several workpackages and individual tasks and milestones within; each deliverable/publication should be clearly interconnected with main milestones.
- Include training from part 1 and be specific.
- Do not forget to plan Dissemination and Communication activities
- Estimate the time for each activity. Try to interconnect all tasks and milestones; secondments and training.
- Proper allocation of PERSONS (who will do what!), technical resources (e.g experiments, computational time in my case)
- Identify all risks, connect them with specific WP/task and try to give the alternative solution
- Describe project management scheme meetings with PI, Host offices, collaborators
- Infrastructure in detail lab, equipment, access to databases, hardware/software, Offices (HRO, TTO, ..)



Implementation

Horizon 2020

- Coherence and effectiveness of the work plan, including appropriateness of the allocation of tasks and resources.
- Appropriateness of the management structure and procedures, including risk management.
- Appropriateness of the institutional environment (infrastructure).

Horizon Europe

- Quality and effectiveness of the work plan, assessment of risks and appropriateness of the effort assigned to work packages.
- Quality and capacity of the host institutions and participating organisations, including hosting arrangements.



Horizon Europe: Implementation

3.1 Quality and effectiveness of the work plan, assessment of risks and appropriateness of the effort assigned to work packages

At a minimum, address the following aspects:

- Brief presentation of the overall structure of the work plan, including deliverables and milestones.
- Timing of the different work packages and their components;
- Mechanisms in place to assess and mitigate risks (of research and/or administrative nature).
- A Gantt chart must be included and should indicate the proposed Work Packages (WP), major deliverables, milestones, secondments, placements. This Gantt chart counts towards the 10-page limit.
- The schedule in the Gantt chart should indicate the number of months elapsed from the start of the action (Month 1).



Horizon Europe: Implementation

3.1 Quality and effectiveness of the work plan, assessment of risks and appropriateness of the effort assigned to work packages

IMPORTANT

- ✓ 2-4 research packages only, consistent with Excellence section
- ✓WP Management: meetings with supervisor / reports to EU at the end of the PF
- ✓ WP Training (and knowledge transfer): consistent with activities in Excellence section
- ✓ WP Dissemination/Exploitation and Communication/Public Engagement: consistent with Impact section
- ✓ Remark possible risks for project objectives and concrete contingency plan and mitigation actions
- ✓ Adapt to project!
- ✓ Make sure it is readable when printed
- ✓ Careful with colours
- ✓ Ask your Host Institution for support



Horizon Europe: Implementation

3.2 Quality and capacity of the host institutions and participating organisations, including hosting arrangements

At a minimum, address the following aspects:

- Hosting arrangements, including integration in the team/institution and support services available to the researcher.
- Quality and capacity of the participating organisations, including infrastructure, logistics and facilities should be outlined in Part B-2 Section 5 ("Capacity of the Participating Organisations").
- Note that for GF, both the quality and capacity of the outgoing Third Country host and the return host should be outlined.

IMPORTANT

- ✓ Work together with your colleagues from Project Office or Technology Transfer Office.
- ✓ Section Capacities of the participating organizations is evaluated here.



Mandatory deliverables

- Mobility declaration submitted within 20 days of the start of the research training activities and updated (if needed) via the Funding & Tenders Portal Continuous Reporting tool
- Career development plan of the recruited researcher, submitted at the beginning of the action (not later than 6 months after its start) and updated if needed throughout the project
- Evaluation questionnaire completed by the recruited researcher and submitted at the end of the research
 training activity; a follow-up questionnaire submitted two years later
- Data management plan submitted within the first 6 months of the project
- Plan for the dissemination and exploitation of results submitted towards the end of the project



MSCA POSTDOCTORAL FELLOWSHIPS

EUROPEAN POSTDOCTORAL FELLOWSHIPS				
STANDARD DURATION		From 12 to 24 months		
ELIGIBILITY CRITERIA				
	Nationality	Any		
RESEARCHER	Mobility	The researcher cannot have resided or carried out his/her main activity (work, studies, etc.) in the country of the beneficiary for more than 12 months in the 36 months immediately prior to the call deadline.		
	Research experience (full-time equivalent)	Maximum 8 years from date of award of the (first) doctoral degree. This limit can be extended (in days) for the following reasons: - Maternity leave (18 months – i.e. 548 days) per child born after the PhD award date, or the exact duration of leave taken, whichever is longest); - Paternity leave (exact duration per child born after the PhD award date); - Research in a non-associated TC (only for nationals or long-term residents of MS or AC, wishing to reintegrate in Europe); - Compulsory national service; - Time spent not working in research (also applies to part-time contracts); - Long-term sick leave (periods > 30 days).		
PARTICIPATING ORGANISATION	Beneficiary	Single independent legal entity established in an EU MS or HE AC.		

GLOBAL POSTDOCTORAL FELLOWSHIPS			
	STANDARD DURATION	From 24 to 36 months: Outgoing phase of minimum 12 and maximum 24 months in a non-associated Third Country; Mandatory 12-month return phase in MS / AC.	
	ELIGIBILITY CRITERIA		
RESEARCHER	Nationality	Nationals or long-term residents of MS or AC.	
	Mobility	The researcher cannot have resided or carried out his/her main activity (work, studies, etc.) in the country of the associated partner hosting the outgoing phase for more than 12 months in the 36 months immediately before the call deadline.	
	Research experience (full-time equivalent)	Maximum 8 years from date of award of the (first) doctoral degree. This limit can be extended (in days) for the following reasons: - Maternity leave (18 months - i.e. 548 days) per child born after the PhD award date, or the exact duration of leave taken, whichever is longest); - Paternity leave (exact duration per child born after the PhD award date); - Compulsory national service; - Time spent not working in research (also applies to part-time contracts); - Long term sick leave (periods > 30 days)	
PARTICIPATING ORGANISATION	Beneficiary	Single independent legal entity established in MS or AC.	
	Associated partner hosting the outgoing phase	Single independent legal entity established in a non-associated Third Country.	

Source: Guide for Applicants



SECONDMENTS

	Secondment	Non-Academic Placement
Maximum Duration	European Postdoctoral Fellowships: Up to 1/3 of the normal project duration. Global Postdoctoral Fellowships: Optional secondments are permitted for up to 1/3 of the outgoing phase.	Up to 6 months duration.
Timing	European Postdoctoral Fellowships: At any time during the standard project duration. Global Postdoctoral Fellowships: Optional secondments cannot take place during the mandatory 12 month return period to the host organisation in a MS or AC. They may take place at the start of the outgoing phase (up to three months, to be included within the 1/3 maximum duration). Note that all optional secondments can be divided into several shorter periods.	Additional period after the standard duration of the fellowship.
Mobility	Any country worldwide	MS or AC
Sector	Any sector	Non-academic sector only
Encoding in Part A	Yes. In "Call Specific Questions" complete all required information.	Yes. The associated partner must be encoded as a participating organisation.
Description in Part B-1	Yes. The relevance and quality will be assessed by the evaluators.	Yes. The relevance and quality will be assessed by the evaluators.
Supporting Document in Part B-2	None.	Yes. A letter of commitment is required.

Source: Guide for Applicants



OTHER USEFUL INFORMATION

- ERA Fellowships in Widening countries (Widening Fellowships under H2020)
- "MSCA PF CZ" Calls (Operational Programme John Amos Comenius, MEYS) to be continued under HE
- Gender Equality Plans:
 - Transition/grace period before full enforcement for calls with deadlines in 2022
 - At first proposal submission stage, a self-declaration will be requested through a dedicated questionnaire
 - An organisation may not yet have a GEP at proposal submission stage, but it must have a GEP in place at the time of the Grant Agreement signature



Ethical aspects

- Applicants should demonstrate proactively that they are aware of and will comply with European and national legislation and fundamental ethical principles
- Clearly identify potential ethical issues in the proposal and detail how these will be addressed!
- Ethics Issues Table in Part A → if ethical issue is flagged, Ethics self-assessment is necessary in Part B
 - Human embryonic stem cells and human embryos
 - Humans
 - Human cells or tissues
 - Personal data
 - Animals
 - Non-EU countries
 - Environment, health and safety
 - Artificial intelligence
 - Other Ethics Issues
 - Crosscutting issue: potential misuse of results

Contact Eva Hillerová <u>hillerova@tc.cz</u>



THINGS TO REMEMBER

- Read all the documents you need to read
- Check your eligibility criteria. Remember: annual calls!
- Talk to your host institution and your supervisor: preparing a good PF proposal needs time and dedication
- It is about research, training and career development, not just an individual research project
- Bottom up yes, but keep in mind the goals of the EC
- Re-submissions: evaluators will not know until after the evaluation has been done:
 - Is it not only about improving the weaknesses
 - Check the state of the art and if your project /approach / methodology is still innovative
- Perseverance: maybe not the 1st time.....but you don 't lose, you learn!



Institutional support to MSCA applicants

- Close cooperation with your supervisor
- Contact your future host institution in time to get the consent
 - Implementation criterion
 - Capacities of participating institutions
 - Letter of commitment
- Your current institution might be also willing to help
- Before sending us your proposal for pre-creening, use the support at institutional level



USEFUL LINKS

- Webpage of the Call MSCA-PF-2021
- Work Programme 2021-2022
- Guide for Applicants (types of projects, eligibility criteria etc.)
- <u>Project proposal Technical description</u> (guidelines on Award criteria)
- Information day on MSCA PF held 21 May (presentations and recording)
- National Portal Horizon Europe
- Marie Curie Actions Website (European Commission)
- Research Executive Agency (responsible for management of MSCA)
- <u>CORDIS</u> (funded projects)
- Net4Mobility+ (MSCA NCP project)
 - Net4Mobility+ Handbook (Call MSCA-IF-2020)
- <u>Euraxess Portal</u> (vacancies, COFUND Programmes)
- Research Enquiry Service (questions)
- MSCA Green Charter
- Guidelines on Supervision
- MSCA newsletter: Subscribe

15 September 2021:

- Deadline for sending MSCA PF proposals for prescreening to capkova@tc.cz
- We accept only complete version of your proposals!



QUESTIONS?





Many thanks to all MSCA fellows and evaluators who work with us!

Eva Baldassarre Švecová, Johana Kotišová, Adam Pecina, Ondřej Daniel, Michal Straka, Hana Sychrová

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Good luck with your proposal.

Zuzana Čapková

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