

Marie Skłodowska-Curie Actions: young researchers' future is a big deal to EU

Laura Paternoster EARMA Conference 2017, Malta 25/4/2017



- The point of view of the EC on MSCA actions: modalities and features of participation, impact, available data and statistics
- The point of view of a EU Institution on MSCA IF: efforts to be successful in MSCA-IF and benefits
- ✓ Your questions

Please do to forget to complete (online) feedback forms



✓ Mario Roccaro

SPEAKERS

policy officer at DG EAC since March 2012, mainly in MSC-RISE; Digital and Online Learning (DOL) Working Group (2014-2016); Max Planck Institute Köln (D); PhD in Molecular Biology from the University of Edinburgh (UK)

✓ Laura Paternoster

Head Research Office-S&T Area, UniTrento (I) since 2013; mainly in support of project-writing (pre-award phase); maternity leave!; International Office 2002-2012 (Head from 2008-2012); Italia-German Chamber of Commerce (D); Degree in Law



UNIVERSITY OF TRENTO

- ✓ a young, middle-sized (~16.000 students), comprehensive University
- Iocated in Trento (Northern Italy): a small city (~ 115.000 inhabitants) in an Alpine area of an autonomous province
- ✓ good positions in national and international rankings:
 - 2016/2017 Censis: UNITN 1st among medium-sized Italian universities
 - 2011-2014 ANVUR: UNITN 1st among State Universities
 - THE- Times Higher Education 2016-2012: ranked in the range 251-275





INTERNATIONAL DIMENTION

- Strengthening the internationalisation process implementing co-operation in teaching and research with national and international Universities
- Support research activities aimed at increasing the standards of Departments within the international scientific community and increase Nr of international academic staff
- ✓ Out of 586 'structured' academic staff, 29 are from abroad (4,9%)
- Every year ~ foreign 80 academic staff (13,6% of structured staff) are hosted as visiting professor





- Increase the level of attraction of high quality Researchers
- Develop the actions to liason and connect to international research networks
- Reinforce the infrastructure services dedicated to EU «individual calls» (i.e. MSC and ERC) for a personalised support to researchers
- MSC as a important instrument of the research strategy





SOME DATA IN H2020

Type of action	2014		2015		2016	
	submitted	approved	submitted	approved	submitted	approved
IF-CAR	1	0	1	1	1	1
IF- GLOBAL	7	0	4	0	6	0
IF- RI	3	1	5	4	4	1
IF- ST	15	3	8	1	15	2
Total:	26	4	18	6	26	4



- Call for expression of interest opened in 2013 to all UNITN disciplines
- Idea: match the ER with the most suitable supervisor at UNITN
- ✓ 30 expressions of interest submitted to UNITN
- ✓ Challenge to involve supervisors
- Joint efforts: researcher + supervisor + grants'
 / research office



- ✓ Call suspended 2014 but still some effects in 2015 and 2016 call (?)
- Decentralised offices to offer a service close-to the researcher's needs
- Training sessions with MSCA_IF evaluators



Some data: UNITN MSC in FP7

Type of action	Proposals		
	submitted	approved	
CIG	13	6	
IEF	14	3	
lif	4	0	
IOF	8	5	
Total:	39	14	



BENEFITS FOR UNITN

- ✓ Chances to host top-level researchers
- ✓ Funding for new outstanding personnel

 ✓ Contributions from the researcher's previously built network (contacts with other high-profile researchers working at EU and non-EU institutions)

 ✓ Establish collaborations between hosting organizations and partner organizations (i.e. for secondment): channel to establish intersectoral collaboration

✓ Future collaboration opportunities after the MSC IF (i.e. through joint projects)



BENEFITS FOR UNITN

- ✓ Opportunity for career development of researchers within the organization (e.g. reintegration programmes/panels)
- ✓ Reputation, visibility and attractiveness
- Higher Nr of incoming scholars = higher national ranking = higher funding
- ...and some «burden»: discouragement by applicants and host institutions for success rate



BENEFITS FOR THE FELLOW

- ✓ Input from high-profile research groups and institution (host institution)
- ✓ Financial Independence
- Significant boost for one's career from two sources:
 - being awarded an MSC IF is in itself very prestigious;
 - valuable experience and networking opportunities





THANK YOU FOR YOUR ATTENTION!

FOR ANY QUESTION: laura.paternoster@unitn.it collina.research@unitn.it

I was taught that the way of progress was neither swift nor easy. (Marie-Skłodowska-Curie)



European Commission

Marie Skłodowska-Curie Actions

A success story of 20 years

Mario Roccaro European Commission Directorate-General for Education, Youth, Sport and Culture

20 Years of MSCA: Past, Present and Future La Valletta 25th April 2017

> Education and Culture

Outline

Why this name?

The history of the MSCA

The MSCA today

MSCA Statistics

The MSCA in the future





7 November 1867





Marie Skłodowska-Curie: the beginning...





Pierre and Marie (Skłodowska-)Curie honeymoon, 1895





Marie Skłodowska-Curie: an excellent researcher

June 1903 Ph.D. at the Sorbonne

1903 Nobel Prize in Physics

1911 Nobel Prize in Chemistry





World War I (1914-1918)



Marie Curie set up mobile radiography units near battle lines to allow X-rays to be taken of wounded soldiers.

Over one million injured soldiers passed through her radiology units.



Marie Skłodowska-Curie Actions The predecessor programmes and their outcomes



The history of the MSCA

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- FP5 (1998-2002):
 - "Host-driven actions" introduced
- FP6 (2002-2006):
 - Third Country nationals and hosts can take part
 - No age limit
- **FP7 (2007-2013)**:
 - New focus on attractive working conditions and inter-sectoral mobility

MSCA Budget in EUR million





Outcomes of the FP7 2007-13 MCA

- MCA fellows were of 140 different nationalities. 24% were from countries outside the EU Member States or FP7 Associated Countries.
- 21% of participants in Initial Training Networks were from the private sector.
- 95% of MCA fellows had employment positions two years after the end of their fellowship.
- 37% of MCA fellows were women, whereas on average 33% of EU researchers were female.
- Evidence that participating organisations improved their practices in respect of recruitment and working conditions.





Fellows at the cutting edge of science

- Stefan W. Hell, one of the winners of the Nobel Prize for Chemistry 2014 was awarded an MCA postdoctoral Individual Fellowship in 1996: 'a critical moment in my career'.
- > 30 scientists supported by the FP7 MCA were involved in the 2012 discovery of the Higgs Boson at CERN.
- The 2016 discovery of gravitational waves, an FP7 MCA project contributed to the breakthrough with 14 early-stage researchers, coordinated by the European Gravitational Observatory.
- Takaaki Kajita Nobel Prize in Physic 2015 for demonstrating that the sun neutrinos change "*flavor*", is involved in two RISE projects.







20 years of MSCA in a nutshell

MARIE SKLODOWSKA-CURIE 1996 - 2016







The MSCA today





2017 celebrating our...



Press release

Exemplary MSCA fellows

MSCA Factsheet



European Education Commission and Culture

Marie Skłodowska-Curie Actions

The three pillars of H2020



MSCA objective:

ensure optimum development and dynamic use of Europe's intellectual capital in order to generate new skills, knowledge and innovation





MSCA







Features of the MSCA

- EUR 6.16 billion for excellent and innovative research training
- Open to all career stages and nationalities
- Bottom-up approach
- Attractive career and knowledge-exchange opportunities through mobility
- 3111: International, Intersectoral and Interdisciplinary
- Development of knowledge and enhancement of skills
- Promotion of attractive working and employment conditions
- SOOO: Open Innovation, Open Science and Open to the World

ommission

Opportunities





MSCA Statistics

Funding Distribution across MS/AC



Participations MS (10554)



Participations AC







MSCA Statistics

Total:	12734	4289	Academic	Non-acade
NIGHT	399	89		5,51
MSCA-RISE	2447	265		0,31
MSCA-ITN	5469	396		
MSCA-IF	3860	3481		
MSCA-COFUND	563	58	1,99	
Actions	Participations	Projects	Budget o	listribution





Success Rate

The 'success' of MSCA means that success rates continue to decline since 2014:

	All countries
MSCA-ITN	9.3%
MSCA-IF	13.6%
MSCA-COFUND	27.7%
MSCA-RISE	28.6%



Achievements in H2020 MSCA

Large body of evidence indicating a positive impact on individuals, organisations and at the system level

25% of fellows have been nationals of countries outside either the EU or the 16 Associated Countries of Horizon 2020

Almost **5000 organisations from 112 countries** have participated so far

More than EUR 300 million has been awarded to organisations outside academia

Up to **1321 companies, including 646 SMEs**, have received funding, principally in the **pharmaceutical**, **electronics**, **chemicals**, **and software** sectors

more than 40% of fellowships awarded to female scientists, are the best performing part of Horizon 2020 with respect to gender

Highest Number of Peer-Reviewed Publications across the H2020 actions

Participations in MSCA account for **more than half** of all participations of **third countries** in Horizon 2020



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Achievements in H2020 MSCA

- Overall satisfaction among MSCA fellows
- Around 25% felt the fellowship had exceeded their expectations while 55% said that it had met them.
- Simplification welcomed, in particular **unit cost approach**
- REA management efficient, e.g., time-to-grant fallen
- Problem oversubscription
 - **30%** budget **increase** for MSCA under H2020 but oversubscription has **doubled** since FP7
 - situation acute for ITN where success rate is 8%
 - a huge loss of talent with **80%** of all **high-quality** MSCA proposals **not** currently funded
- Strong support for interdisciplinary research

- **69%** of fellows involved in projects with businesses are doing interdisciplinary research compared to **36%** of fellows with projects that have no business organisation involved.

- Estimated 30% of MSCA proposals in IF deemed to have included multidisciplinary research


MSCA Calls 2017



ITN Innovative Training Networks

What does it offer? High-quality research training delivered through interdisciplinary networks, industrial doctorates or joint doctorates.

Who applies? International networks of research organisations from the academic and non-academic sectors

Who is funded? Researchers at doctoral level (less than 4 years of full-time research experience and no doctoral degree)

Call details: next WP



IF Individual Fellowships

What does it offer? Opportunities to work on personal research projects by moving between countries and possible sectors to acquire new skills.

Who applies? Individual researchers together with the host organisations

Who is funded? Postdoctoral researchers

Call details: Opens: 11 April 2017 Closes: 14 September 2017 at 17:00:00 Brussels time Budget: 248M€



RISE Research & Innovation Staff Exchange

What does it offer? The exchanges of staff members involved in research and innovation to develop sustainable collaborative projects and the transfer of knowledge.

Who applies? International networks of research organisations from the academic and non-academic sectors

Who is funded? Researchers, technical administrative and managerial staff of any nationality and at all career levels

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COFUND

Co-Funding of Regional, National & International Programmes

What does it offer? Regional national or international programmes to foster excellence in training mobility and career development of researchers

Who applies? Organisations funding or managing doctoral or fellowships programmes

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The MSCA in the future



Fully exploiting the MSCA

Making the MSCA approach the norm across Europe:

- Through the MSCA we set a benchmark for how to keep, attract and develop the best research talent
- The benefits to employers of investing in high-quality career development practices have been proven by the outcomes of the MSCA
- EUA Taking Salzburg Forward, 2016: greater numbers of PhD candidates should benefit from the institutional structures developed for doctoral education in recent years



Seal of Excellence



Certificate for highly-scored applicants to MSCA Individual Fellowships (IF), who the call budget was unable to fund

- To be sent soon to qualifying applicants to the IF 2016 call for proposals
- Creating a webpage where national funding opportunities for holders of the Seal will be placed
- Voluntary instrument, entirely up to national funders to use it or not
- Encourage use of regional, national or Structural Funds (e.g. CZ and CY)



Next step: adoption of the 2018-2020 WP expected in October 2017

- Possible Impact on ITN 2018 call opening and deadline
- Part-time option for ER in IF on pilot basis
- European Joint Doctorates: At least 2/3 of the supported ESR must be enrolled in a joint, double or multiple degree within Europe
- RI (extended scope) and CAR panels strengthened (more budget) and longer duration for CAR (up to 3 years)
- Global Fellowships possibility to spend time at the European beneficiary before the outgoing mobility foreseen
- RISE less strict eligibility criteria for secondments
- Teaching will be highlighted
- Increase budget for ITN to counter low success rate
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Slovak Presidency Declaration of Young Researchers

Calls for:

- > Sustainable funding schemes for junior researchers
- > More explicit criteria for career progression
- More opportunities for non-traditional career paths that include work outside academia
- Reinforce the EU support available for this group
- Foster mobility for excellence, but also close the research divide between Member States/regions
- Researchers will need digital and entrepreneurial skills
- Wider uptake of EU Principles for Innovative Doctoral Training
- European networking and showcasing of the best early-stage researchers

http://www.eu2016.sk/data/documents/bratislava-declaration-of-young-researchers-final.pdf

http://www.consilium.europa.eu/en/meetings/compet/2016 14301 center pdf/



MSCA post-H2020

- EUR 6.16 billion under H2020 supports 65 000 researchers using four main actions
- Budget under FP9 dependent on so many factors
- Will it be necessary or feasible to offer the current range of opportunities?
- Mid-term evaluation of H2020 ongoing, including MSCA:
 - It will assess progress and help prepare the ground for FP9
 - Supported by a high-Level Group chaired by Pascal Lamy
 - Commission Communication autumn 2017



More information

Marie Skłodowska-Curie website http://ec.europa.eu/msca

Horizon2020 http://ec.europa.eu/programmes/horizon2020

Participant Portal (calls, online application, documents, FAQ, NCPs) <u>http://ec.europa.eu/research/participants/portal</u>

> Euraxess (jobs, rights, services, etc.) http://ec.europa.eu/euraxess/

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> How to find partners https://cordis.europa.eu/partners/web/guest

MSCA on Facebook https://www.facebook.com/Marie.Curie.Actions

> MSCA on Twitter @MSCactions





H2020 Help desk

http://ec.europa.eu/research/index.cfm?pg=enquiries

Frequently Asked Questions

http://ec.europa.eu/research/participants/portal/desktop/en/support/faq.html

National Contact Points

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Marie Curie Alumni Association

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7 November 1867 150 years after EARMA





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RSITÀ DEGLI STUDI













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Maile Skiuuuwska-cuile Actions

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UNIVERSITÀ DEGLI STUDI DI TRENTO





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Euraxess (jobs, rights, services, etc.)

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How to find partners https://cordis.europa.eu/partners/web/guest

MSCA on Facebook https://www.facebook.com/Marie.Curie.Actions

> MSCA on Twitter @MSCactions





Questions?

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