



Horizon 2020 Work Programme for Research & Innovation 2018-2020

Research Career Opportunities: MSCA & ERC

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Research and

Overview

- Marie Skłodowska-Curie Actions Opportunities for RESEARCHERS training and career development
 - 1. Individual Fellowship
 - 2. Innovative Training Networks
 - 3. Research and Innovation Staff Exchange
 - 4. Sri Lanka Participation
- **European Research Council** Frontier research by the best individual RESEARCH teams







 Frontier research by the best individual teams

Future and Emerging Technologies

 Collaborative research to open new fields of innovation

Marie Skłodowska Curie actions

 Opportunities for training and career development

Research infrastructures (including e-infrastructure)

Ensuring access to world-class facilities

Industrial Technologies

- Leadership in enabling and industrial technologies
 - ICT, nanotechnologies, materials, biotechnology, manufacturing, space

Access to risk finance

 Leveraging private finance and venture capital for research and innovation

Innovation in SMEs

 Fostering all forms of innovation in all types of SMEs

Societal Challenges

- Health, demographic change and wellbeing
- Food security, sustainable agriculture, marine and maritime research & the bioeconomy
- Secure, clean and efficient energy
- Smart, green and integrated transport
- Climate action, resource efficiency and raw materials
- Inclusive, innovative and reflective societies
- Security society

European Institute of Innovation and Technology (EIT)

Spreading Excellence and Widening Participation

Science with and for society

Joint Research Center (JRC)







Marie Skłodowska-Curie Actions





MSCA funding schemes - Overview

Which action?	ITN Innovative Training Networks (Host applies)	IF Individu al Fellowships (Individuals apply)	RISE Research and Innovation Staff Exchange (Host applies)	COFUND Co-Funding of Regional, National and International Programmes (Funder applies)
What does it offer?	High-quality research training delivered through international and interdisciplinary networks, industrial doctorates or joint doctorates	Opportunities to work on personal research projects by moving between countries and possibly sectors to acquire new skills	International and/or intersectoral exchanges of staff members involved in research and innovation to develop sustainable collaborative projects and transfer knowledge	Regional, national or international programmes to foster excellence in researchers' training, mobility and career development
Who is it for?	Networks of organisations that train researchers at doctoral level (less than four years of full-time research experience and no doctoral degree)	Postdoctoral researchers (doctoral degree or at least four years of full-time research experience)	Partnerships of organisations that undertake a joint research project supported by the exchange of their staff (researchers, technical, administrative and managerial staff)	Organisations funding or managing doctoral programmes or fellowship programmes



Mainly for Sri Lankan
early-stage
researchers and Sri
Lankan
organizations



For Sri Lankan experienced researchers and Sri Lankan organisations



For Sri Lankan organizations



For Sri Lankan researchers



What do Marie Skłodowska-Curie Actions (MSCA) offer?



Opportunities for training and career development of researchers

MSCA principles

- Mobility of researchers is mandatory
- General opening to all career stages and <u>nationalities</u>
- Bottom-up approach = what does it mean?
- International, inter-sectoral and interdisciplinary career and knowledge-exchange





1. MSCA - Individual Fellowship (IF)





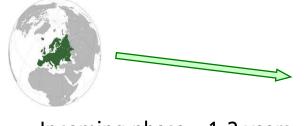
Individual Fellowships - Principles

- No <u>pre-defined research topics</u> (***bottom-up***)
- TARGET: Experienced Researchers = 95 % Post-Doc Researchers
- Doctoral degree (95% of the applicants) or
- at least 4 years' research experience (full-time equivalent) after graduation at the deadline of submission
- Application process researcher together with the chosen host institution
- General opening to all nationalities

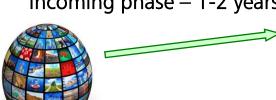
Mobility Rule: Researchers must not have resided or carried out their main activity in the country of their host organization for more than 12 months in the previous 3 years prior to the submission



Individual Fellowship funding schemes



Incoming phase – 1-2 years





European Fellowship

Sri Lankan Researchers

Global Fellowship

Sri Lankan Organisations (Host)







Outgoing phase – 1-2 years, after that return phase to Europe (1 year)



IF European Fellowship

- 1 PHASE One to Two-year research stay in Europe (MS/AC)
- Experienced researchers of <u>any nationality</u> (→ mobility rule)
- **Host institution** = <u>in EUROPE</u> active in Research & Development, e.g. University, Research Organization, Company (incl. SME), NGO, etc.
- Host institution and supervisor can be chosen freely by the researcher (researchers must look for a supervisor / host institution, who is willing to supervise the applicant during the stay)
- Researchers will receive a work contract including social security for 12-24 months
- Submission and evaluation in eight scientific panels: CHE, SOC, ECO, ENG, ENV, LIF, MAT, PHY



IF Global Fellowships

2 mandatory phases

- 1 to 2-year research stay **outside of Europe** (→ mobility rule)
- 1-year return phase in Europe
- Experienced researchers with MS/AC nationality or MS/AC long-term residence (at least 5 consecutive years in an MS/AC as a researcher in the past)
- 2 host institutions
- in a third country (partner organisation) * interesting for Sri Lankan institutions as a <u>host</u> for European researchers
- in MS/AC (return phase), contractual partner of the EU
- Submission and evaluation in 8 scientific panels: CHE, SOC, ECO, ENG, ENV, LIF, MAT, PHY



2. MSCA – Innovative Training Networks (ITN)





Innovative Training Networks



- A network of organisations can apply for funding
- An early-stage researcher (<u>PhD student</u>) can participate in existing joint research training or PhD programmes of international networks in Europe

ETN

European
Training
Networks

Participants implement a joint research programme

EID

European Industrial Doctorates

Doctoral programme with the non-academic sector

EJD

European Joint Doctorates

Doctoral programme to deliver joint degrees



Innovative Training Networks (ITN)

European Training Networks	European Industrial Doctorates	European Joint Doctorates	
At least 3 beneficiaries (recruiting institutions) in 3 different MS/AC	At least 2 beneficiaries in 2 different MS/AC and from both different sectors (1 academic institution / 1 non- academic institution)	At least 3 beneficiareis in 3 different MS/AC At least 3 beneficiaries must be entitled to award a doctoral degree	
ETN	EID	EJD	



ITN Objectives

- to conduct first-class research → excellent research is the most important feature of any ITN
- to train a new generation of creative, entrepreneurial and innovative researchers
- to contribute to structuring doctoral/early-stage research training at the European level
- to gain a higher employability in both sectors (academic / non-academic)



ITN definitons

- **Beneficiary** signs the Grant Agreement, recruits at least one Early-Stage Researcher (ESR), receives funding from the European Union
- <u>Partner Organisation</u> (e.g. Sri Lankan institution) does not sign the Grant Agreement, does not recruit researchers, does not receive funding from the European Union, hosts researchers during secondments and offers training activities

Find your network and apply as <u>individual researcher</u>

<u>Euraxess: https://euraxess.ec.europa.eu/</u>



3. MSCA – Research and Innovation Staff Exchange (RISE)





Research and Innovation Staff Exchange (RISE)

- Projects to promote international and inter-sectoral
 collaboration through research and innovation staff exchanges
- Transfer of knowledge through secondment of staff members,
 from research to market, etc.
- Fostering a <u>shared culture</u> of research and innovation
- **Transnational secondments** of research and innovation staff with return mechanisms
- Use of complementary expertise of all partners
- **Networking activities**: Workshops, conferences, etc.



RISE conditions

- At least 3 institutions from 3 different countries, of which at least 2 from MS/AS
- <u>In case</u> all institutions belong to the same sector (e.g. academic sector): <u>at least 1 institution</u> should be from a third country
- Maximum duration of the programme: (up to) 4 years
- Participation of Third Countries is encouraged
- Important: secondments only possible between Sri Lanka and MS or AC – secondments between third countries are not eligible for funding



RISE application procedure

- Call opens once a year → dates are listed in the MSCA
 Work Programme 2018 2020
- Last Horizon 2020 Call Deadline: 07/04/2019
- Submission in eight scientific panels (the same ones)
- 2019 Total budget: 80M €. Budget is allocated to each panel according to the number of proposals
- Success rate in Horizon 2020 so far: > 25%



4. MSCA - Sri Lanka Participation





Sri Lanka in MSCA – Overview of the figures

In detail, the number of the organisation participations and the budget awarded to them, as well as the number of researcher mobilities involving these organisations:

Action	Number of Participations of LK organisations*		EU contribution (in EUR million) to LK organisations	Number Of Projects	LK researchers involved	Researchers going to LK organisations
COFUND	N/A	(-)	N/A	N/A	2	0
IF	N/A	(-)	N/A	N/A	2	0
ITN	N/A	(-)	N/A	N/A	9	0
RISE	1	(1)	N/A	1	2	2
Total:	1	(1)**	N/A	1	15	2

^{*} Number of Participations is the number of participations by organisations i.e. the total number of times that organisations in this country have participated in each action.



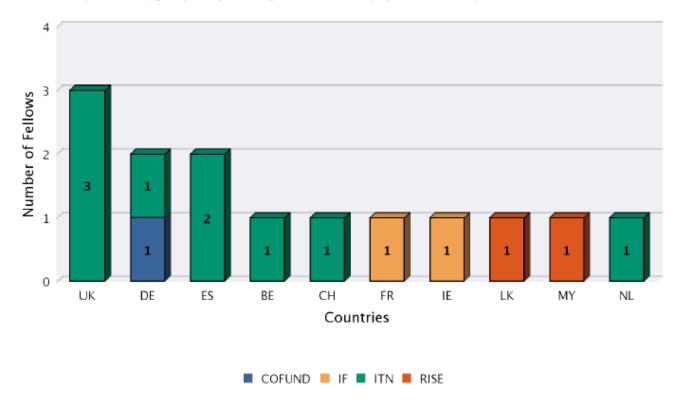




^{**}In brackets - partner organisations (included in the total number).

Researchers - Countries of Destination

LK fellows (nationals) grouped by country of destination (top 10 countries)





Organisations – Who won?

Participating LK organisations by type of organisation

	Total	% Total	% Average OCAF
Academic	1	100,00 %	82,69 %
Non-Academic			17,31 %
Private for Profit			10,84 %
• SMEs			0,70 %

Top LK participating organisations in terms of number of participations

Name	Number of participations
UNIVERSITRY OF PERADENIYA	1







HORIZON 2020 MSCA - LAST CALL

Funding scheme	Publication	Budget	Deadline
ITN 20	12.10.2019	525 Mio. €	09.01.2020
RISE 20	05.12.2019	80 Mio. €	07.04.2020
IF 20	08.04.2020	325 Mio. €	09.09.2020
COFUND 20	08.04.2020	100 Mio. €	29.09.2020

Find MSCA COFUND and ITN open call for <u>individual researchers</u> on Euraxess: <u>https://euraxess.ec.europa.eu/</u>



MSCA contacts in Europe - Net4Mobility+



Network of the European National Contact Points (NCPs) for MSCA

www.net4mobilityplus.eu/

Services provided:

- Contacts and important dates/events
- FAQs section
- Documents about proposal writing, handling IPR, outreach activities, etc.
- Official documents of the European Commission



The European Research Council





What does the ERC offer?



- TARGET Excellent RESEARCHERS who wish to conduct their groundbreaking research in Europe
- Bottom-up approach No thematic priorities
- → Investigator-driven



ERC Principles

- 1 Principal Investigator ("researchers in chief") and team
- 1 Host institution in Europe = EU / Associated Countries
- 1 Selection criterion: EXCELLENCE
- At least 50% of the research has to be done in Europe
- Project duration: Up to 5 years



4 ERC main funding lines



Starting Grant: Early career top researchers, 2-7 years after PhD | € 2 mil.

Consolidator Grant: Top researchers, 7-12 years after PhD | €2.75 mil.

Advanced Grant: Senior researchers with significant research achievements |€3.5 mil.

Synergy Grant: 2-4 excellent researchers and their teams, researchers with complementary skills, knowledge and resources, project duration max. 6 years | €14 mil.

NEW 2019: one PI per Synergy Grant group at any one time can be hosted or engaged by an Institution from a Third Country



Profile of Principle Investigator (PI) / Researcher

- Promising CV and Track Record
- At least one (Starting) or several (Consolidator) important publications without a PhD supervisor

Conditions during the project

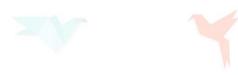
- Starting: at least 50% of working time on the ERC project
- Consolidator: at least 40% of working time on the ERC project
- Advanced: at least 30% of working time on the ERC project
- All: At least 50% of working time in Europe



Bottom-Up Approach

All fields of science, all topics

- 3 scientific domains
- Physical Sciences & Engineering (PE)
- Life Sciences (LS)
- Social Sciences and Humanities (SH)
- In total 25 Panels with high-class scientists that evaluate the proposal – assisted by remote specialists





ERC - What is evaluated?

- **1. Excellence of the research project -** Ground-breaking nature and potential impact & Scientific approach
- 2. Excellence of the Principle Investigator (PI) Ability to propose and conduct ground-breaking research, Evidence of creative independent thinking, Achievements typically beyond the state-of-the-art, etc.

Step 2 of the evaluation includes an interview in Brussels







Individual researchers can apply to join existing
 ERC teams in Europe

• Find jobs in ERC Teams:

https://euraxess.ec.europa.eu/









Horizon 2020 ERC - LAST CALL

Indicative summary of main calls from the 2020 budget¹

	Starting Grant	Consolidator Grant	Advanced Grant	Synergy Grant	Proof of Concept Grant
Call identifier	ERC-2020-StG	ERC-2020-CoG	ERC-2020-AdG	ERC-2020-SyG	ERC-2020-PoC
Call Opens	17/07/2019	24/10/2019	14/05/2020	18/07/2019	15/10/2019
Call closes (cut-off dates for PoC)	16/10/2019	04/02/2020	26/08/2020	05/11/2019	21/01/2020 23/04/2020 17/09/2020

Source: ERCEA



Useful links and ERC promotional video

To know more about ERC:

https://erc.europa.eu/

ERC videos:

https://vimeo.com/28818767

https://vimeo.com/31716309











Thank you!

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www.ec.europa.eu/research

Participant Portal

http://ec.europa.eu/research/participants/portal/

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