

# **HORIZON 2020**

# The EU Framework Programme for Research and Innovation

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REGIONAL REPRESENTATIVE EURAXESS NORTH AMERICA

### **EURAXESS - Researchers in Motion**

 is a unique pan-European initiative providing access to a complete range of information and support services to researchers wishing to pursue their research careers in Europe or with European partners;

#### **EURAXESS North America**

- news & events;
- information on European R&I Framework Programme and Policies;
- collaboration & hosting opportunities;
- information on career development and funding (flashnotes, social media)

EURAXESS North America links researchers in North America with the European Research Area. We provide free information and events on research funding, research careers and collaboration opportunities



## What is Horizon 2020?



The EU's programme for research & innovation 2014-20

€77 billion over 7 years

- Investing in future jobs and growth
- Addressing people's concerns about their livelihoods, safety and environment
- Strengthening the EU's global position in research, innovation and technology



# **Three Priorities**

Excellent science € 24 billion

Industrial leadership € 17 billion

Societal challenges € 30 billion



## **Priority 1. Excellent Science**

€24 billion, 2014-2020

European Research Council (ERC)	
	13.10
Future and Emerging Technologies	
	2.59
Marie Sklodowska-Curie actions (MSCA)	
	6.16
Research Infrastructures including e-infrastructures	
	2.39



## Marie Sklodowska-Curie actions (MSCA)

#### Innovative Training Networks (ITN)

2017: € 430 mio. deadlines 10 Jan

 Doctoral and initial training of researchers proposed by international networks of organisations from public and private sectors

#### Individual Fellowships (IF)

2017: € 248 mio. deadlines 14 Sep

 Individual fellowships for most promising experienced researchers to develop their skills through international or inter-sector mobility

### R&I Staff Exchange (RISE)

2017: € 80 mio. deadlines 05 Apr

 International and inter-sector cooperation through the exchange of research and innovation staff

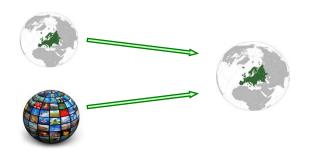


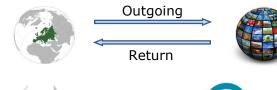
# Individual Fellowships (IF)

- Enhance the creative and innovative potential of experienced researchers
- ✓ Provide opportunities to acquire new knowledge, work on research projects in a European context or outside Europe
- ✓ Catalyse significant **development in their careers** in both sectors
- ✓ Optional 3-6 month secondments anywhere in Europe to increase fellowship impact, especially on non-academic sector
- ✓ Budget: €248.7 million in 2017 (Global Fellowships: €33.7 million)



Global Fellowships (2-3 years)







# **MSCA Financial Overview**

	Research, networking, training costs	1800 €	Living allowance*	3110 €
ITN			Mobility allowance	600 €
	Management and indirect costs	1200 €	Family allowance	500 €
	Research, networking,	800 €	Living allowance*	4650 €
IF	training costs		Mobility allowance	600 €
	Management and indirect costs	500 €	Family allowance	500 €
COFUND	Management costs 325 €	225.6	Living allowance Early-stage researchers	1855 €
		325 <b>€</b>	Living allowance Experienced researchers	2625 €
RISE	Research, networking, training costs	1800 €	Ton un allowance	2000 €
	Management and indirect costs	700 €	Top-up allowance	2000 €

<sup>\*</sup> The living allowance base rate is multiplied by a Country Correction Coefficient



# **MSCA Calls 2017**

### Total 2017: €839 million

ITN	15/09/2016 - 10/01/2017	EUR 430 million
IF	11/04/2017 – 14/09/2017	EUR 248.70 million
COFUND	05/04/2017 – 28/09/2017	EUR 80 million
RISE	01/12/2016 - 05/04/2017	EUR 80 million



# **European Research Council**

ERC calls are open to researchers of any nationality, age or current place of work in the world (with at least 50% of work time in Europe)

#### ERC offers independence, recognition & visibility

- to work on a research topic of own choice, with a team of own choice
- to gain true financial autonomy for 5 years
- to negotiate with the host institution the best conditions of work
- to attract top team members (EU and non-EU) and collaborators
- to move with the grant to any place in Europe if necessary (portability of grants)
- to attract additional funding and gain recognition; ERC is a quality label

# **European Research Council**

Starting Grants
starters (2-7 years
after PhD)
up to € 2 Mio for 5
years

**Consolidator Grants** 

consolidators (7-12 years after PhD) up to € 2.75 Mio for 5 years **Advanced Grants** 

track-record of
significant
research
achievements in
the last 10 years
up to € 3.5 Mio for 5
years

#### **Proof-of-Concept**

bridging gap between research - earliest stage of marketable innovation up to €150,000 for ERC grant holders for 18 months

**Synergy Grants** 

Up to € 10 Mio for up to 6 years
1-4 PIs

# **Attracting researchers to Europe**

# **Flexibility**

- Additional 'start-up' funding for scientists moving to Europe (€500 000 for Starting, €750 000 for Consolidator and €1 Mio for Advanced grantees)
- Grantee can keep affiliation with home institute outside Europe ('significant part' of work time in Europe, at least 50%)
- Team members can be based outside Europe
- Grantee can move within Europe with the grant



# **ERC** open and upcoming calls

ERC calls	Budget	Call Opening	Submission Deadline(s)
Starting Grants ERC-2017-StG	605 M€	26 July 2016	18 October 2016
Consolidator Grants ERC-2017-CoG	575 M€	20 October 2016	9 February 2017
Advanced Grants ERC-2017-AdG	567 M€	16 May 2017	31 August 2017
Synergy Grants ERC-2018-SG	20 M€	19 July 2017	14 Novemb 2017

## **Priority 2. Industrial Leadership**

### €17 billion, 2014-2020

Leadership in enabling and industrial technologies (LEITs)  ICT, nanotechnologies, materials, biotechnology, manufacturing, space	13.04
Access to risk finance Leveraging private finance and venture capital for research and innovation	2.84
Innovation in SMEs  Fostering all forms of innovation in all types of SMEs	0.62



## **Priority 3. Societal Challenges**

€29.7 billion, 2014-2020

Health, demographic change and wellbeing	7.26
Food security, sustainable agriculture, marine and maritime research & the bioeconomy	3.71
Secure, clean and efficient energy	5.69
Smart, green and integrated transport	6.15
Climate action, resource efficiency and raw materials	2.96
Inclusive and reflective societies	1.26
Secure societies	1.61



# **Rules of Participation**

#### **Minimum Conditions:**

- •For standard (collaborative) research projects:
  - 3 participants from different Member States or associated countries

<u>In addition</u>, participants from any other country in the world can also be included

- •For actions aimed at individuals, like European Research Council or Marie Skłodowska-Curie:
  - ➤ 1 researcher
  - > 1 host institution
  - ➤ 1 project







# **Eligibility for funding depends on country**

- List of third countries eligible for funding (Developing Countries) (see General Annexes in Work programme)
- No automatic funding for entities from industrialised countries (USA) and BRIC (Brasil, Russia, India, China) and Mexico
- Only eligible for funding, if
- >specified in the Work Programme or
- participation deemed essential for the project (outstanding competence/expertise, access to research infrastructure, access to particular geographical environments, access to data) or
- bilateral agreement between the EU and the

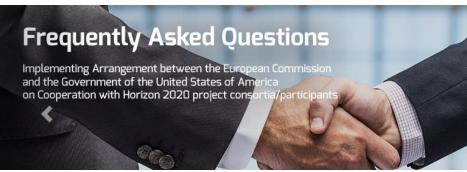
respective country

US-partners are eligible under all topics in calls of the Societal Challenge 'Health, demographic change and wellbeing'.



## **NEW for US-Partners**





Facilitates cooperation between US organizations and Horizon 2020 participants. The aim of the arrangement is to enable US researchers to cooperate with Horizon 2020 projects outside the framework of the grant agreement, and to increase cooperation in research projects.

An FAQ on this EU-US
Implementing Arrangement has
now been prepared by the EC
services, in cooperation with
their US counterparts, and can
be found here:

http://ec.europa.eu/research/is
cp/pdf/eu-us coop faq.pdf



## **H2020 Work Programme 2016-17**

- ✓ Published 14 Oct 2015
- √ 30% of topics flagged for international cooperation
- > 50 topics specifically relevant to U.S.
- ✓ Special focus areas:

€ 1040 million

Industry 2020 in the Circular Economy Pilots, factories of the future, sustainable process industries	<b>353.5</b> (2016) <b>316</b> (2017)
Internet of things	<b>104</b> (2016) <b>35</b> (2017)
Smart and sustainable cities	<b>120</b> (2016) <b>111.5</b> (2017)



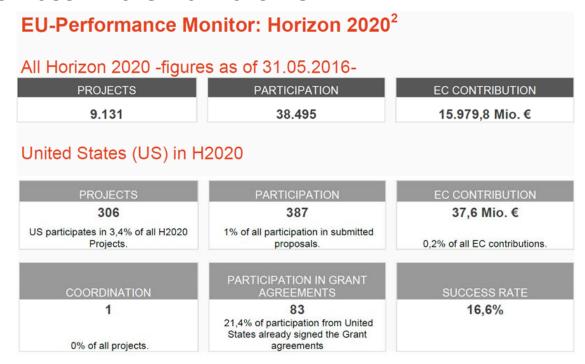








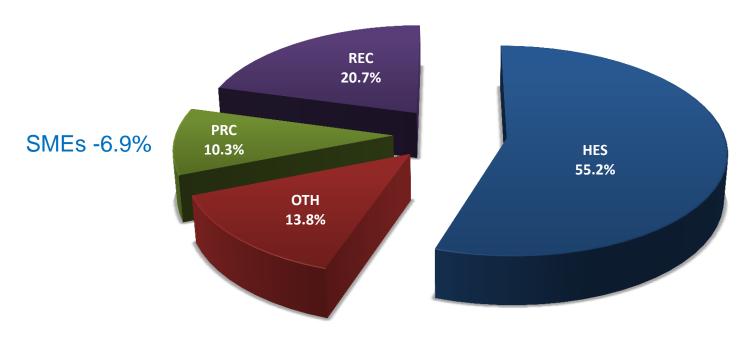
•According to the Cordis database there are 83 signed H2020 Projects with 387 U.S. participants entitled to receive around 37.639 mio € from the EC







# U.S. participants in H2020 projects by type



Higher or secondary education (HES)
Private for profit (excluding education) (PRC)
Public body (excluding research and education) (PUB)
Research organisations (REC)
Other (OTH)





# Priority areas of EU-US STI cooperation

Priority areas of EU-US STI cooperation are:

- 1.Health Research
- 2.Marine and Arctic Research
- **3.NMP** (Nanotechnologies, Materials and Production Technologies)
- 4.Transportation Research

- •Health research is the leading priority area. 35 projects have already been launched, of which 28 are health research projects receiving funding from the EC in H2020.
- •"Higher or Secondary Education Establishments" are the type of organizations that are counted most often in the priority areas.



## **Participation Possibilities**

- ERC grantees
- Marie Skłodowska-Curie Action
- As fellows / associated partners / hosts
- Collaborative projects
- Full partner / third party / subcontractor in all areas of H2020
- Research Partner under EU-US H2020 Implementing Arrangement
- Funding
- Not available, as a rule, to participants from non-European industrialized countries
- Exceptions:
  - Health Research
  - Research Infrastructure Integrating Activities
  - Ad hoc exceptions
  - Subcontractors





#### **Become an evaluator**

All research proposals submitted to H2020 are peer reviewed by independent experts.

The EU is always interested to build up its database of potential expert evaluators, including from outside Europe.

Much of the evaluation process is done remotely and is paid.

If interested in applying:

http://ec.europa.eu/research/participants/portal/desktop/en/e
xperts/index.html



## Participant Portal – your one-stop shop

- Topics
- Documents
- Rules for participation
- Online manual
- E-submission



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



## **Useful links**

- EURAXESS: <u>www.euraxess.org</u>
- Marie Sklodowska-Curie Actions:
   <a href="http://ec.europa.eu/research/mariecurieactions/">http://ec.europa.eu/research/mariecurieactions/</a>
- European Research Council: <a href="http://erc.europa.eu/">http://erc.europa.eu/</a>
- ERC Step by Step: <a href="https://vimeo.com/117398570">https://vimeo.com/117398570</a>
- Horizon 2020: <a href="http://ec.europa.eu/programme">http://ec.europa.eu/programme</a>







- Projects Bilateral Transatlantic Cooperation with the EU
  - BILAT USA 4.0: <a href="http://www.euussciencetechnology.eu/">http://www.euussciencetechnology.eu/</a>
- Bridge between researchers and policy-makers in Europe
  - Voice of the Researchers: <a href="http://voice.euraxess.org/">http://voice.euraxess.org/</a>







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# **THANK YOU**