

. Delegation of the European Union 駐日欧州連合代表部

HORIZON 2020

EU-Japan research cooperation opportunities through Marie Sklodowska-Curie Actions and European Research Council under EU's Horizon 2020 programme Boost Your Career: Grants In Practice! 25.7.2016 Tom Kuczynski Science and Technology EU Delegation to Japan

WHAT IS HORIZON 2020?

•A single programme: €80 billion research and innovation funding programme (2014 -2020)

•A response to economic crisis by investing in future jobs and growth

•Coupling research with innovation: 'from lab to market'

•Focus on societal challenges: health, clean energy, transport, etc.

•Open to participation: companies, universities, institutes in the EU and beyond

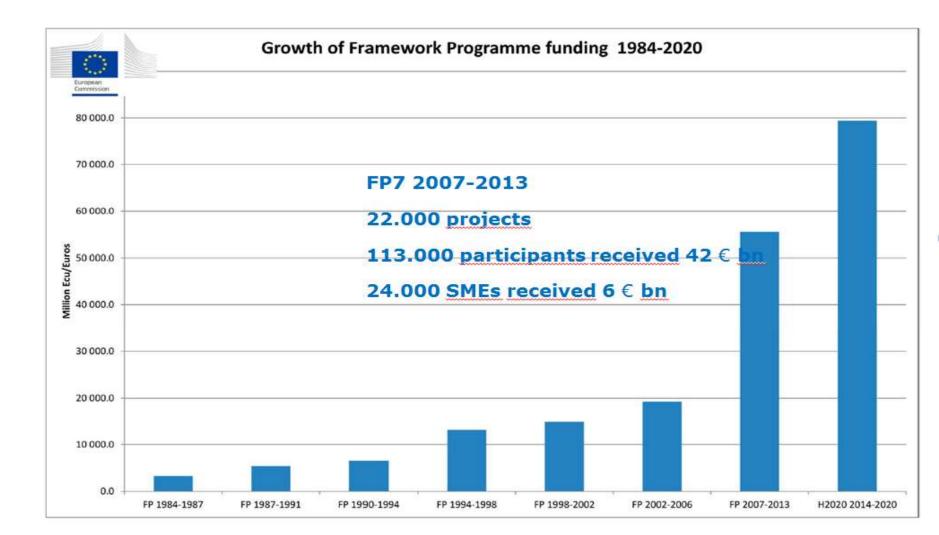


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How has EU Research and Innovation funding evolved over recent years?





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HORIZON 2020

Work Programme WP 2016-17 2014-15

H2020 2014-2020

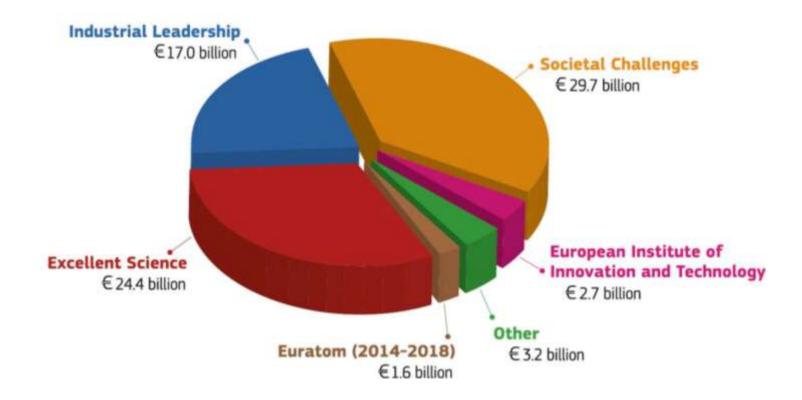
WP 2018-2020

- Budget of nearly EUR 16 bn •
- 63 Calls, nearly 600 topics and other activities \mathbf{O}
- 23 topics explicitly inviting cooperation with Japanese researchers
- In 2016 alone, about **1000 ERC grants and** 10,000 MSCA fellowships
- About **EUR 2 bn funding** > 2000 innovative SMEs

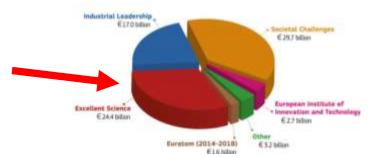


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Horizon 2020 budget (2014-2020)



Excellent science



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• European Research Council

Supporting top researchers from anywhere in the world to work in Europe

Future and Emerging Technologies

Supporting visionary thinking through collaborations between science and engineering

Marie Skłodowska-Curie actions

Providing opportunities for training and career development of individual researchers

• Research infrastructures - including e-infrastructure

Ensuring access to world-class facilities

Marie Skłodowska-Curie Actions

- Mobility of researchers from all over the world
- Focus on training and career development of researchers
- Participation of non-academic sector strongly encouraged, especially industry and SMEs
- For researchers at every stage of their career
- Coverage for all domains of research (bottom-up approach)
- promotion of attractive working and employment conditions (financing rate of 100%)





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Global reach Mobility Requirement in all projects 130 nationalities, 80 countries Marie Skłodowska-Curie actions A packet guide

Your passport to a successful research career

Marie Skłodowska-Curie Actions

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Participation of Japan in MSCA

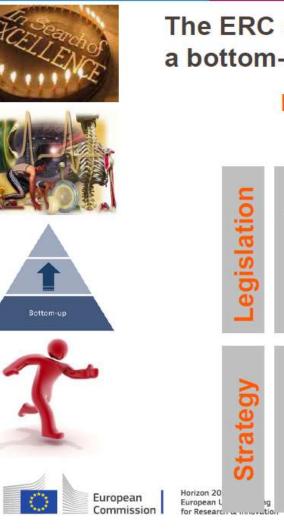
FP7 (2007-2013) IF – 9 ITN – 17 IRSES (**RISE**) – **49** Total 75 Horizon 2020 so far (2014 - 2015) IF – 1 ITN – 9 **RISE – 17** Total 29

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What is ERC?





The ERC supports excellence in frontier research through a bottom-up, individual-based, pan-European competition

Budget: € 13 billion (2014-2020) - 1.9 billion €/year € 7.5 billion (2007-2013) - 1.1 billion €/year

Scientific governance: independent Scientific Council with 22 members including the ERC President; full authority over funding strategy

Support by the ERC Executive Agency (autonomous)

- Excellence as the only criterion
- Support for the individual scientist no networks!
- Global peer-review
- No predetermined subjects (bottom-up)
- Support of frontier research in all fields of science and humanities

ERC Grant Schemes



European Research Council Established by the European Commission

Starting Grants

starters (2-7 years after PhD) up to € 2.0 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



Horizon 2020 European Union funding for Research & Innovation

ERC offers independence, recognition & visibility

• to work on a research topic of **own choice**, with a team of **own choice**

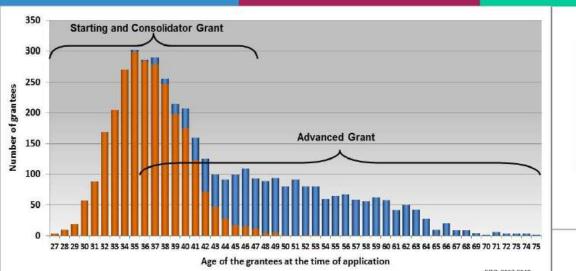
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- to gain true financial autonomy for 5 years
- to negotiate with the host institution the best conditions of work
- to attract top team members (EU and non-EU) and collaborators
- to move with the grant to any place in Europe if necessary (portability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

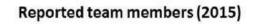
Priority to Young Scientists



European Research Council Established by the European Commission



+ 22 000 PhD and post-doc researchers working in ERC teams.

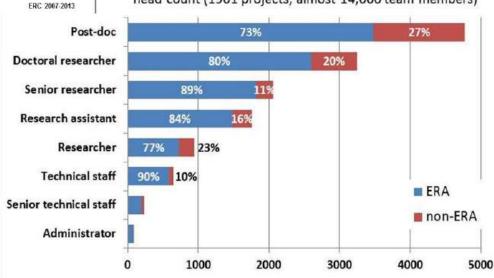


head count (1901 projects; almost 14,000 team members)

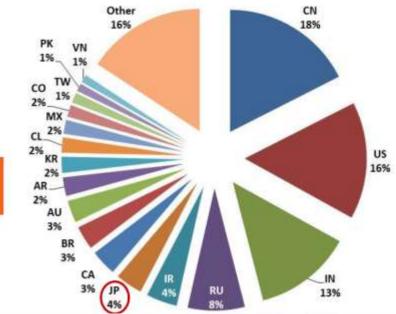
Two-thirds of ERC grants to early-stage Principal Investigators.



Horizon 2020 European Union funding for Research & Innovation



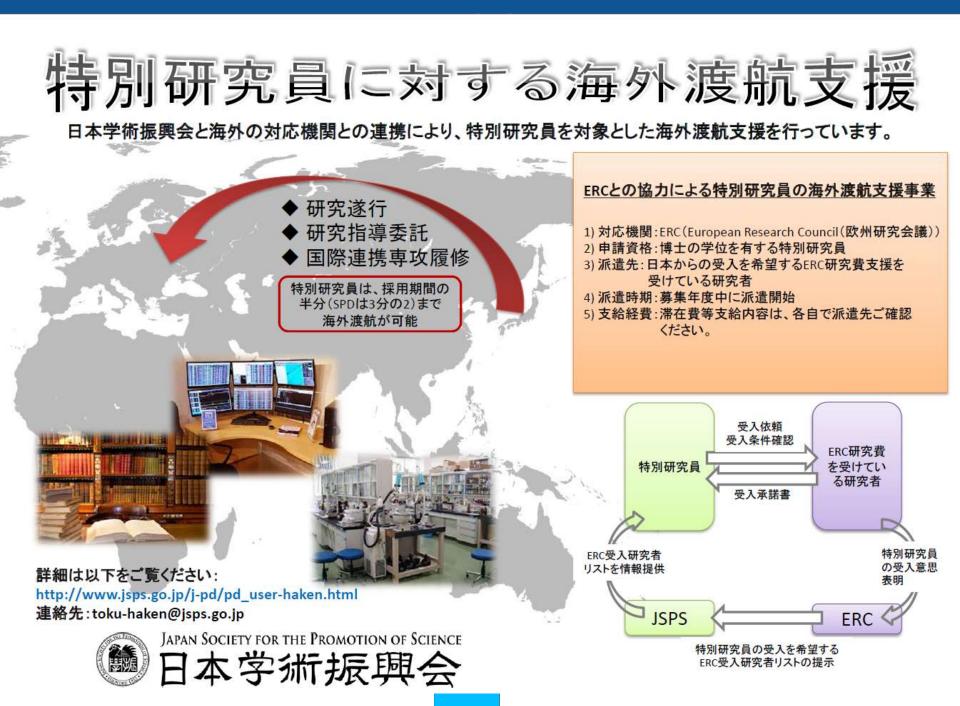
Nationality of ERC project teams (PIs not included) Analysis of 1,901 Starting and Advanced Grants



EU: 71% Assoc. Countries: 10% non-ERA: 17% unknown: 2%

+ 6,500 non-ERA team members most from China, US, India, and Russia

Non-ERA Principal Investigators	Starting and Consolidator grants	Advanced grants	Total grants
USA	102	75	177
Canada	32	9	41
Russia	25	8	33
Australia	25	4	29
India	24	2	26
Japan	18	1	19
New Zealand	9	4	13
China	12	0	12
Argentina	9	0	9
Other	37	7	44
Total	292	110	402



THE FRAMEWORK PROGRAMME FOR RESEARCH AND INNOVATION

HORIZ () N 2020

http://ec.europa.eu/research/horizon2020



or

<u>http://ec.europa.eu/research/participants/portal/desktop/</u> <u>en/opportunities/h2020/index.html</u>

Thank you for your attention!

Participant Portal http://ec.europa.eu/research/participants/portal/desktop/en/home.html Helpdesk http://ec.europa.eu/research/enquiries National Contact Point in Japan ncp-japan@eu-japan.gr.jp CORDIS http://cordis.europa.eu/projects/home_en.html ERA-NET in Horizon 2020 http://ec.europa.eu/research/era/era-net-in-horizon-2020_en.html Expert evaluators needed! http://ec.europa.eu/research/participants/portal/desktop/en/experts/

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