

EU public funding opportunities for US entities/researchers

Filipa Duarte

IC² Fulbright Visiting Scholar

Filipa Duarte

Coordinator

















Research and Innovation Accelerator

Faculty of Science and Technology | UNL

Outline





Outline |

- I. US participation in Framework Programme 6 and 7 (FP6 & FP7)
- II. Overview of Horizon 2020:
 - i. Expected impact
 - ii. Organization
 - iii. Budget
 - iv. Areas
 - v. General Rules





Outline |

- III. Opportunities of US entities/researchers
 - i. European Research Council
 - ii. Marie Skłodowska Curie Actions
 - iii. Research Infrastructures
 - iv. Information and Communication Technologies
 - v. Health, demographic change and wellbeing
 - vi. Europe in a changing world Inclusive, innovative and reflective societies







US Participation in FP6 & FP7





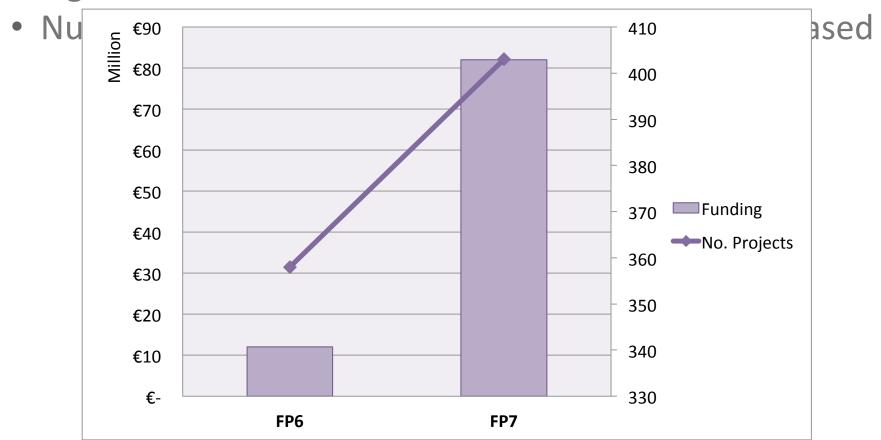
FP | US participation

Agreement for Scientific and Technological

Cooperation:



• Signed between and in 1998







FP US participation

Statistics of FP7 (7 years program):

- Total <u>number of projects</u>: 403
- Funding: €82 million for US entities
- Success Rate:
 - Proposals with US participants: 25%
 - Average Third Countries: 18,5%

1st Round of Horizon 2020 (1 year):

- Total <u>number of projects</u>: 35
- Success Rate:
 - Proposals with US participants: 28.3%
 - Average Third Countries: 22.7%







Overview of Horizon 2020





H2020 | Horizon 2020 for R&I

Horizon 2020: European Union's Strategic Programme for Research and



H2020 | Impact of Horizon 2020 for R&I

Horizon 2020

Key Features

Projects financed on the basis of excellence

Projects selected through intense pan-European competition

Ambitious collaborative projects with critical mass

Projects not achievable without EU support (additionality)

Projects leveraging additional private and public resources

Seamless support from idea to market

Easy access for all participants including SMEs





Research and innovation outputs of Horizon 2020

- Improved R&D capabilities
- Scientific publications
- New tools and techniques
- Models and simulations
- Prototypes, demonstrators, pilots
- Patents
- New products, processes, services
- Spin-offs

Societal Impact

Economic growth

 €1 invested in Horizon 2020 produces €10 extra GDP per annum

More high-tech jobs

• >800,000 in the medium term

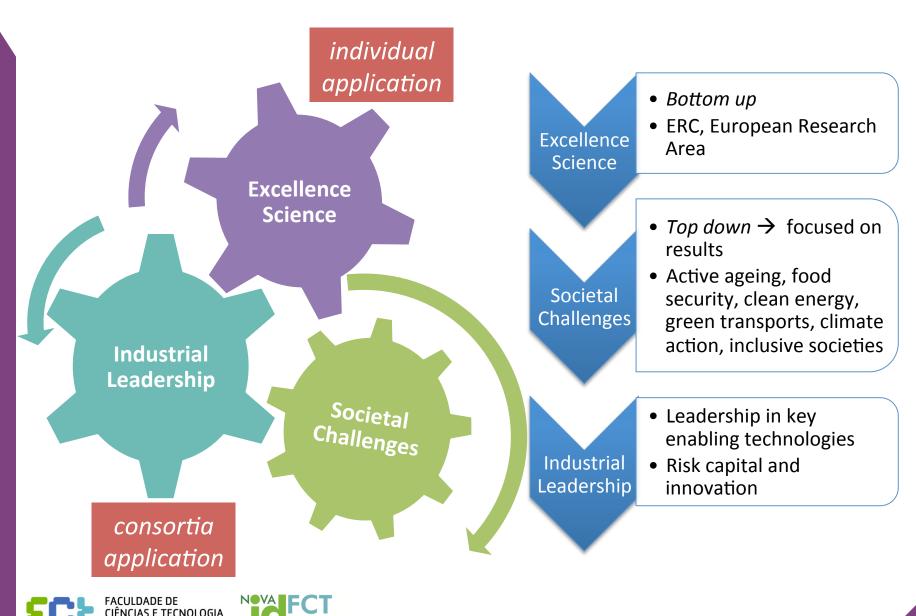
Competitiveness

 Exports increase by 1,4% and imports decrease by 0,2% in the medium term

Inclusive & sustainable growth

- Better health & more well-being
- · A more secure society
- Sustainable agriculture
- Clean & efficient energy
- Smart, green, integrated transport
- Reduced greenhouse gas emissions
- Efficient use of natural resources

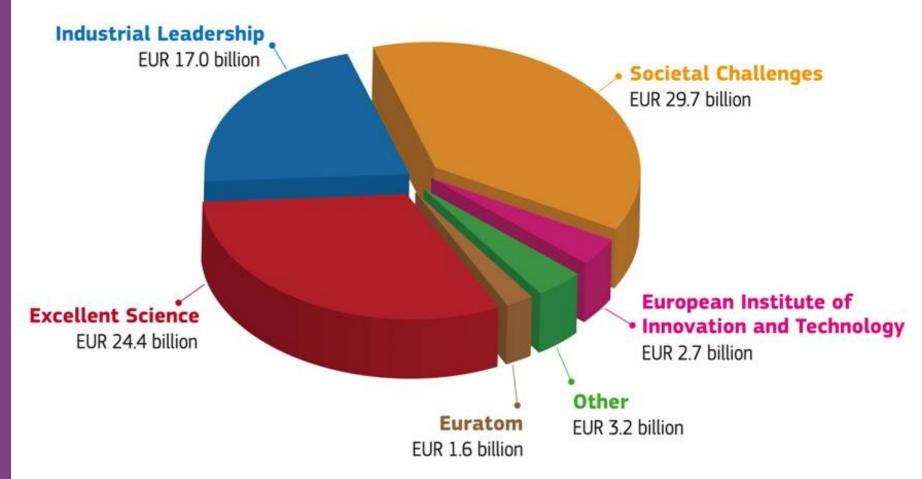
H2020 How is it organized?



H2020 | Budget Distribution

HORIZON 2020 BUDGET

EUR 78.6 billion (prices of 2014)







H2020 | Areas

Excellent Science

- **■** European Research Council
 - 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 Leadership

- 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 & bioeconomy
- Secure, clean and efficient energy
- Smart, green and integrated transport
- Climate action, resource efficiency and raw materials
- Inclusive, innovative and reflective societies
- Secure societies

Spreading Excellence and Widening Participation

Science with and for society

European Institute of Innovation and Technology (EIT)

Joint Research Center (JRC)

H2020 | General Rules

Requirements:

- Minimum of three organizations in three European countries (EM/AC)
- Encourages the participation of small and medium sized enterprises and industry
- Welcomes international participation and partnerships

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Horizon 2020 (general description/permanent)

Pillar (activity description/permanent)

Work Programme (objectives per pillar/every two years)

Call for Proposals (topics description/opens every year)
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Opportunities of US entities/researchers







Excellent Science





Deadlines:

StG: 17 November 2015 CoG: 02 September 2016

AdG: 01 September 2016



European Research Council:

- Bottom-up: Talented individuals to form research 'teams' to undertake ground-breaking research
- ERC awards are typically a mono-partner project, based in a single institution
- There are four main awards offered by the ERC:
 - Starting, Consolidator and Advanced Grant and Proof of Concept
- Funding is very generous ranging from €1.5 million to
 €4.5 million





Funding:

100% direct costs + 25% indirect costs



European Research Council:

- Research institutions outside Europe are <u>eligible</u> for funding if <u>host</u> researchers who are part of the research team and essential to the project.
- Principal investigators are required only to spend a minimum of 50% of their work time in an EU Member State or Associated Country. They can spend the other half of their time in the US.
- Additional funding for researchers coming from outside Europe.





Deadline: 14 September 2016



Marie Skłodowska-Curie Actions:

Individual Fellowships

- European
- Global
- Operates in a 'bottom-up' basis
- Support the research career
- Mobility, transnational and intersectoral
- <u>Aim:</u> develop new knowledge / enhance skills of people behind research and innovation





Funding: Flat rate per researcher



Marie Skłodowska-Curie Actions:

- <u>European Individual Fellowships:</u> Senior US researchers (with PhD) seeking positions and advanced research and/or innovation training in Europe
- Global Individual Fellowships: For US institutions, as they provide full funding (salary, travel and accommodation) for senior European researchers to receive training and conduct research for one to two years in the USA





Deadlines:

30 March 2016 29 March 2017



INFRAIA-01-2016-2017:

Integrating Activities for Advanced Communities

<u>Aim:</u> 'Advanced Communities' are scientific communities whose research infrastructures show an advanced degree of coordination and networking at present

Funding: 8 to 9 projects per year, each up to €10 million

Eligibility of funding: USA as soon as provide access to their research infrastructures to researchers from EU Members States and Associated Countries







Funding:





INFRAIA-01-2016-2017: Integrating Activities for Advanced Communities

Domains	Domains
Facilities for high throughput DNA sequencing	Research Infrastructures for research on biomass conversion and biorefinery
Vaccine infrastructures	Research Infrastructures for offshore renewable energy
Experimental facilities for animal disease and infectiology (including zoonoses)	Research infrastructures for terrestrial research in the Arctic
Centres for replacement, reduction and refinement (3 Rs) of non-human primate testing	Research Infrastructures for earthquake hazard
Facilities and resources for plant phenotyping	Mesocosms facilities for research on marine and freshwater ecosystems
Marine biological stations	Atmospheric simulation chambers
Research Infrastructures for the control of vector- borne diseases	Research infrastructures for forest ecosystem and resources research







Funding:

100% direct costs + 25% indirect costs



INFRAIA-01-2016-2017: Integrating Activities for Advanced Communities

Domains	Domains
Research Infrastructures for advanced radio astronomy	Sites, experimental platforms and data collections of anthropogenic impacts for ecosystem functioning and biodiversity research
Research Infrastructures for optical/IR astronomy	Multidisciplinary Marine Data Centres for ocean and marine data management
Research Infrastructures for hadron physics	Integrating activity for facilitating access to HPC (High Performance Computing) Centers
Particle Accelerators	Research Infrastructures for advanced spectroscopy, scattering/ diffraction and imaging of materials.
Access to European Social Science Data Archives and Official Statistics	Synchrotron radiation sources and Free Electron Lasers
Research infrastructures for the study of poverty, working life and living conditions	Facilities for research on materials under extreme magnetic conditions
	Infrastructures for Neutron Scattering and Muon Spectroscopy







Funding:

100% direct costs + 25% indirect costs

Deadlines:

30 March 2016 29 March 2017



INFRAIA-02-2017:

Integrating Activities for Starting Communities

<u>Aim:</u> A 'Starting Community' has never been supported for the integration of its infrastructures under FP7 or Horizon 2020 calls, in particular within an integrating activity

Funding: 8 projects per year, each up to €5 million

Eligibility of funding: USA as soon as provide access to their research infrastructures to researchers from EU Members States and Associated Countries









Industrial Leadership





Funding:

100% direct costs + 25% indirect costs

Deadline: 08 November 2016



ICT-07-2017:

5G PPP Research and Validation of critical technologies and systems

<u>Aim:</u> 1) Wireless access and radio network architecture/ technologies; 2) High capacity elastic - optical networks; and 3) "Software Network".

Funding: 12/13 projects, each between €5/8 million

Eligibility of funding: International cooperation with clear EU industrial benefits, preferably with nations having launched strategic 5G initiatives (e.g. USA)







Funding:

70% direct costs + 25% indirect costs

Deadline: 08 November 2016



ICT-08-2017:

5G PPP Convergent Technologies

<u>Aim:</u> 1) Ubiquitous 5G access leveraging optical technologies; and 2) Flexible network applications.

Funding: 5 projects, each between €5/8 million

Eligibility of funding: International cooperation with clear EU industrial benefits, preferably with nations having launched strategic 5G initiatives (e.g. USA)







Funding:

100% direct costs + 25% indirect costs

Deadline:

25 April 2017



ICT-31-2017:

Micro- and nanoelectronics technologies

<u>Aim:</u> Future electronics and industrial relevant technologies => low-power & high performance

Funding: 5 projects, each between €2/4 million

Eligibility of funding: International cooperation with clear EU industrial benefits, preferably with nations that have substantial research in the area (e.g. USA)









Societal Challenges





Funding:

100% direct costs + 25% indirect costs 70% direct costs + 25% indirect costs

Deadlines:

16 February 2016 12 & 13 April 2016 04 October 2016 31 January 2017 14 March 2017 11 April 2017



Health, demographic change and well-being:

In recognition of the opening of the US National Institutes of Health's programmes to European researchers, any legal entity established in the United States of America is eligible to receive Union funding to support its participation in projects supported under the following topics







Personalised Medicine Call

Understanding health, well-being and disease

Preventing disease

Treating and managing diseases

Active ageing and self-management of health

Methods and data

Health care provision and integrated care

Coordination activities

Standardisation of pre-analytical and analytical procedures for in vitro diagnostics in personalised medicine

Implementing the Strategic Research Agenda on Personalised Medicine

Towards globalisation of the Joint Programming Initiative on Antimicrobial resistance

Global Alliance for Chronic Diseases (GACD)

Actions to bridge the divide in European health research and Innovation

Coordinated action to support the recognition of Silver Economy opportunities arising from demographic change

Digital health literacy

Healthcare Workforce IT skills

EU-US interoperability roadmap

EU eHealth Interoperability conformity assessment

Standardisation needs in the field of ICT for Active and Healthy Ageing









Funding:

100% direct costs + 25% indirect costs

Deadline:

14 Abril 2016



ENG-GLOBALLY-09-2016:

Centres/Networks of European research and innovation

<u>Aim:</u> Create a network of centres in the world's most dynamic and innovative countries that will connect and support European researchers and entrepreneurs globally

Funding: 3 projects, each maximum €3 million

Eligibility of funding: Legal entities established in the target country/region are eligible for funding (e.g. USA)









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Important Info



Horizon 2020 Participants Portal



Horizon 2020 Guide for US researchers



The US 'pilot' NCP:

Mr. Jesse SZETO, Senior Manager

National Council of University Research Administrators (NCURA)

Tel.: +1 (202) 466-3894

Email: szeto@ncura.edu



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Faculty of Science and Technology | UNL

Questions?



gab.ad.ria@fct.unl.pt



www.sites.fct.unl.pt/ria



+351 212 947 897 (ext. 15038)



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