HORIZON 2020

The EU Framework Programme for Research and Innovation

Open to the World: Building resilience through international cooperation

Dr. Mary Kavanagh
Minister-Counsellor, Research and Innovation
European Union Delegation to the USA
What is Horizon 2020?

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

€77 billion over 7 years

- EUROPE's research contribution to resolving global challenges with global partners
- Promotion of global mobility of researchers
- OPEN TO THE WORLD!

http://ec.europa.eu/research/horizon2020
Cooperative Research Projects

• 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 and reflective societies
  • Secure societies

• Enabling and Industrial Technologies
  • ICT, nanotechnologies, materials, biotechnology, manufacturing, space
How International Cooperation Builds Resilience

• It offers economies of scale and scope
• Provides access to expertise, equipment and facilities
• Builds networks and alliances
• Offers opportunities for businesses and commercialization
• Career Development
• Cross disciplinary and Cross border fertilization of ideas

International cooperation is essential to tackle Global Challenges
Human Brain Project

• EU has earmarked 406 million Euro for this initiative, together with national funding it will reach 1 Billion Euro.

• The HBP is funding researchers to collect multi-level and multi-scale brain data, and to produce models and simulations to provide a first understanding of the brain's complex organization and functions.

• It is part of an alliance of international Brain Research Initiatives which also includes the US Brain Project as well as the initiatives in Japan, Korea and Australia.

• The objective is to leverage and align the efforts to maximize efficiency and the combined impact – maximizing the return on investment for taxpayers around the globe.
Global Health

Community engagement drives Ebola vaccine trial in Sierra Leone

To ensure the right person takes an Ebola trial vaccine at the right time in Sierra Leone, an EU-industry funded project is employing a combination of low-tech and high-tech community engagement strategies. Today, 450 adults and 96 adolescents are successfully enrolled in a two-stage vaccine trial.

Project details

- **Project acronym:** EBODAC
- **Participants:** UK, Belgium, Ireland, United States
- **Total costs:** €25,740,856
- **EU contribution:** €20,328,856
- **Duration:** December 2014 to November 2017

© avatar_023 - fotolia.com
Atlantic Ocean Observation

An integrated observing system for the Atlantic Ocean

Buoys, floats, moorings and research vessels, to name just a few examples - data about the state of the Atlantic is collected by a number of means. And by a profusion of actors, who could jointly produce even better results if they applied a common strategy. EU-funded researchers are driving the development of an integrated system.

Project details

Project acronym: AtlantOS

Participants: Germany (Coordinator), UK, Ireland, Denmark, France, Poland, Norway, Spain, Portugal, Netherlands, Faroe Islands, Belgium, Italy, Croatia, Canada, Brazil, United States, South Africa

Total costs: € 20 652 921

EU contribution: € 20 652 921

Duration: April 2015 to June 2019
Examples of areas inviting US cooperation (US Flagships) Work Programme 2018-2020

**Marine Arctic**
- All Atlantic Ocean Alliance
- Cryosphere and risks

**Health**
- Mutual Opening for US,
- Multilateral cooperation

**Transport**
- Road automation,
- Aviation – green and safe

**Energy**
- Renewable fuels

**Nano Safety**
- Regulations
- Safe Design
EU - US Flagship cooperation examples

**Automated Vehicles:**

**Call in 2019**
30 million € funding

Specifically mentioned for EU-US project twinning with US entities participating in projects funded by the US Department of Transport

Additional countries invited

**Nano-Safety:**

**Call in 2018**
28 million € funding

EU-US Collaboration is strongly encouraged and all projects are expected to collaborate with similar projects under the Communities of Research of the US National Nanotechnology Initiative
Thank you!

#InvestEUresearch
www.ec.europa.eu/research
Participant Portal www
Rules of Participation

Minimum Conditions

- **For collaborative research projects:**
  - 3 participants from different Member States or associated countries
  - In addition, 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
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:
Participant Portal – your one-stop shop

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

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

http://ec.europa.eu/research/horizon2020
### 4 ways for US researchers to participate in Horizon 2020

<table>
<thead>
<tr>
<th>I. Standard Horizon 2020 Terms</th>
<th>II. Article 14a “International Partners”</th>
<th>III. Regular 3rd party (e.g. subcontract or legal link, EU definition)</th>
<th>IV. EU-U.S. Implementing Arrangement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Considered as:</td>
<td>Beneficiary</td>
<td>Third Party (linked to beneficiary either via subcontract (Art. 13) or legal link (Art. 14))</td>
<td>EU as Beneficiary U.S. as “Research Partner” to the project</td>
</tr>
<tr>
<td>Form of funding:</td>
<td>EU funding from Horizon 2020 in exceptional cases possible and SC1</td>
<td>EU partner funded via H2020 U.S. partner brings own funding</td>
<td>EU Partner: Horizon 2020 U.S. partner: brings U.S. funding</td>
</tr>
<tr>
<td>Agreement with funding organisations:</td>
<td>H2020 Grant Agreement</td>
<td>No legal obligation to sign an agreement, but U.S. International partner must be named in Grant Agreement</td>
<td>EU Partner: Grant Agreement U.S. Partner: Subcontract or legal link with beneficiary</td>
</tr>
<tr>
<td>Agreement in consortium:</td>
<td>Consortium Agreement in accordance with H2020 regulations All parties share complete workload</td>
<td>Can sign MoU or alternative agreement U.S. partner has responsibility for specific task</td>
<td>EU Partner: H2020 Grant Agreement U.S. Partner: signs own agreement with their funding organisation</td>
</tr>
<tr>
<td>Form of Reporting:</td>
<td>In accordance with H2020 regulations (and via Participant Portal)</td>
<td>EU partner in accordance with H2020 regulations and can report about U.S. International Partner U.S.: in accordance with US funding organization but reports to EU partner</td>
<td>EU partner: in accordance with H2020 regulations, U.S.: in accordance with U.S. funding organisation</td>
</tr>
</tbody>
</table>
For further information

• **Participant Portal**

• **Helpdesk**
  http://ec.europa.eu/research/enquiries

• **National Contact Points**
  http://ec.europa.eu/research/participants/portal/desktop/en/support/national_contact_points.html

• **Expert evaluators needed!**

• **Learn more about Horizon 2020**
  http://ec.europa.eu/horizon2020

**THANK YOU!**
About NCURA

- Our Members – Research Administrators
- 3 Annual Conferences
- Horizon 2020 Pilot National Contact Point

Claire Chen, chen@ncura.edu

Over 800 members in Top 20 U.S. Research Universities

HORIZON 2020
Funded by the European Union, the BILAT USA 4.0 project aims to:

1. Facilitate the policy dialog
2. Foster transatlantic research partnerships
3. Identify emerging research topics
4. Engage the private sector

http://www.euusscienceandtechnology.eu/
Consortium partners

6 U.S. Partners
- Universities
- Think Tanks
- University Association

10 EU Partners
- Private Companies
- Government Agencies & affiliated organizations
- University
- Research Institutions

BILAT USA 4.0 receives funding by the European Union under Horizon 2020, Grant Agreement number 692468
How can Bilat USA 4.0 Help?

1. Up-to-date information and news (Website and social media)
2. Informational Webinars and Training Programs
3. Resources
4. Nationwide information system
5. Connecting Researchers, Policy-makers, and Private Sector

http://www.euusscienceandtechnology.eu/
 Outputs

- Report on EU Funding Program for U.S. Researchers
  - National Level Funding
  - Regional Level Funding

- Database

  http://www.euussciencetechnology.eu/funding
Outputs

- Report on U.S. Funding Opportunities for EU Researchers
  - Federal Agencies
  - Non-Federal Agencies/ Private Foundations
  - Additional Resources

- Database

http://www.euussciencetechnology.eu/funding
BILAT USA 4.0 aims to facilitate research and innovation cooperation between researchers and companies with various networking and partnering activities. Additionally, main research and innovation programmes as well as reciprocal funding opportunities between EU and USA will be announced on this portal.

**Horizon 2020**

- Calls Targeting International Cooperation

**ERA Funding Platforms- Transnational Initiatives**

**S&T Implementing Arrangements between U.S. Government Entities and the European Commission**

**S&T Agreements between EU and Member States/Associated Countries and U.S.**
Outsputs

Guide on H2020 for U.S. Based Researchers
To help US researchers to find opportunities to collaborate with European researchers in H2020

- Database H2020 Structure
- Identify specific opportunities
- Explains specific rules and regulations for participation and Funding in Europe
- How to prepare and application, negotiate grant and consortium agreement
- Manage a project
- Protect project intellectual property rights

http://www.euussciencetechnology.eu/documents
 Outputs

- **Terminology Guide**
  - Obstacle of research collaboration
  - Wiki format

<table>
<thead>
<tr>
<th>Cost-Share</th>
<th>In-kind Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-recipient</td>
<td>Third Party</td>
</tr>
<tr>
<td>F&amp;A Rate</td>
<td>Indirect Cost</td>
</tr>
</tbody>
</table>

- **Link:** [https://bilat-wiki.ethz.ch/wiki/Main_Page](https://bilat-wiki.ethz.ch/wiki/Main_Page)
Welcome to the **Terminology MediaWiki**

The **Terminology MediaWiki** is an online platform that aims to explain and juxtapose EU and US funding terminologies. If you know whether you are looking for a specific EU and/or US term, you can go directly either to the European Terms or the US Terms section. Otherwise please consult the Glossary.
<table>
<thead>
<tr>
<th>EU</th>
<th>US</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accession forms</td>
<td>Subaward</td>
</tr>
<tr>
<td>Account Administrator</td>
<td>Account Administrator</td>
</tr>
<tr>
<td>Amendment</td>
<td>Modification</td>
</tr>
<tr>
<td>Annex</td>
<td>Appendix</td>
</tr>
<tr>
<td>Annotated Model Grant Agreement</td>
<td>Research Terms and Conditions</td>
</tr>
<tr>
<td>Applicant</td>
<td>Applicant</td>
</tr>
<tr>
<td>Award</td>
<td>Award</td>
</tr>
<tr>
<td>Background</td>
<td>Background Inventions</td>
</tr>
<tr>
<td>Beneficiary Register</td>
<td>System for Award Management</td>
</tr>
<tr>
<td>Budget</td>
<td>Budget</td>
</tr>
<tr>
<td>Call for proposals</td>
<td>Funding Opportunity Announcement</td>
</tr>
<tr>
<td>Call Identifier</td>
<td>Opportunity Number</td>
</tr>
</tbody>
</table>
Transnational Researchers Career Program

- Program for postdocs and PhD students
- Pre-award and Post-award training for both EU and US funding
- Career needs for International research administrators
- Spearheaded by ETH Zurich and Harvard University
ENRICH in the USA - Research Connection Symposium
August 8th, Washington, D.C.

https://usa.enrichcentres.eu/
Thank you!

Claire Chen
NCURA Global
National Council of University Research Administrators
Telephone +1 202.466.3894 | chen@ncura.edu
http://www.ncura.edu

More info:
http://www.euussciencetechnology.eu
What's in it for you?

- Jobs & Funding
- Partnering Tool & Hosting
- Information & Assistance
  EURAXESS Service Centers
- EURAXESS Worldwide
  (ASEAN, China, India, Japan, LAC, North America)
Marie Skłodowska-Curie Actions (MSCA)

The Actions provide funding for excellent researchers, encourage mobility across borders and sectors and foster collaboration among individuals and institutions.

MSCA: European Union's main programme for researcher training and career development through mobility.

Budget 2014-2020: € 6.162 billion
MSCA - Features

- Open to all career stages and nationalities
- **Bottom-up** approach
- **International**, intersectoral and interdisciplinary
- **Hosting** talented foreign researchers, creating strategic partnerships
- Equipping researchers with necessary skills and international careers
- Attractive career and knowledge-exchange opportunities through mobility
- **Good working conditions** and social benefits
Marie Skłodowska-Curie Actions

**ITN**
Innovative Training Networks
What does it offer?
High-quality research training delivered through international and 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 four years of full-time research experience and no doctoral degree)

---

**IF**
Individual Fellowships
What does it offer?
Opportunities to work on personal research projects by moving between countries and possibly sectors to acquire new skills

Who applies?
Individual researchers together with the host organisation

Who is funded?
Postdoctoral researchers

---

**RISE**
Research and Innovation Staff Exchange
What does it offer?
The exchange 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

---

**COFUND**
Co-Funding of Regional, National and International Programmes
What does it offer?
Regional, national or international programmes to foster excellence in researchers’ training, mobility and career development

Who applies?
Organisations funding or managing doctoral programmes or fellowship programmes

Who is funded?
Researchers at doctoral and postdoctoral level

**Overall success rate:** 13%

**Success rate of US nationals:** 18%

<table>
<thead>
<tr>
<th>Year of the Call</th>
<th>Number of applications with US nationals</th>
<th>Funded projects for US nationals</th>
<th>Number of US institutions hosting a fellow</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>212</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>247</td>
<td>42</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>262</td>
<td>49</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>277</td>
<td>53</td>
<td>x</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>998</strong></td>
<td><strong>181</strong></td>
<td><strong>99</strong></td>
</tr>
</tbody>
</table>
Horizon 2020 Budget € 77 billion
ERC Budget € 13 billion
What does ERC offer?

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 5/6 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
ERC Grant Schemes

**Starting Grants**
- starters
- 2-7 years after PhD
- (≥ 50% commitment)
- up to € 2.0 Mio
- for 5 years

**Consolidator Grants**
- consolidators
- 7-12 years after PhD
- (≥ 40% commitment)
- up to € 2.75 Mio
- for 5 years

**Advanced Grants**
- track-record of significant research achievements in the last 10 years
- (≥ 30% commitment)
- up to € 3.5 Mio
- for 5 years

**Synergy Grants**
- 2 – 4 Principal Investigators
- up to € 14.0 Mio
- for 6 years
Participation of non-EU/AC nationals: 30 non-EU/AC nationalities

Almost 8% of all ERC grants to principal investigators of non-EU/AC nationality

<table>
<thead>
<tr>
<th>Non-EU/AC Principal Investigators</th>
<th>Starting and Consolidator grants</th>
<th>Advanced grants</th>
<th>Total grants</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>162</td>
<td>93</td>
<td>255</td>
</tr>
<tr>
<td>Canada</td>
<td>60</td>
<td>10</td>
<td>70</td>
</tr>
<tr>
<td>Russia</td>
<td>40</td>
<td>9</td>
<td>49</td>
</tr>
<tr>
<td>India</td>
<td>43</td>
<td>2</td>
<td>45</td>
</tr>
<tr>
<td>Australia</td>
<td>37</td>
<td>6</td>
<td>43</td>
</tr>
<tr>
<td>Japan</td>
<td>23</td>
<td>6</td>
<td>29</td>
</tr>
<tr>
<td>China</td>
<td>27</td>
<td>0</td>
<td>27</td>
</tr>
<tr>
<td>New Zealand</td>
<td>10</td>
<td>6</td>
<td>16</td>
</tr>
<tr>
<td>Argentina</td>
<td>15</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>Other</td>
<td>64</td>
<td>8</td>
<td>72</td>
</tr>
<tr>
<td>Total</td>
<td>481</td>
<td>140</td>
<td>621</td>
</tr>
</tbody>
</table>
EURAXESS North America: WHAT we do and HOW

Linking researchers in North America to Europe

Information on European funding opportunities

Research career development
Thank you!

Viktoria Bodnarova
EURAXESS North America
Regional Representative
northamerica@euraxess.net
http://northamerica.euraxess.org

EURAXESS North America

EURAXESS Links – Internationally
Mobile Researchers