

## Assessment report

## **R&I cooperation status** Key facts and figures: USA



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This country report (as of March 2023) provides an assessment of U.S. participation in H2020 MSCA and identifies gaps, challenges, and opportunities for improved and more strategic promotion of MSC Actions in Horizon Europe.

More information on the United States and 19 other countries and 6 other regions are also available on the MSCAdvocacy website.

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## 1. United States: R&I bilateral cooperation policy context

The EU and US share the critical research values of transparency, academic freedom and ethics, and fairness, and have had a rich history of cooperation and partnership in science, technology, and innovation. Their longstanding partnership in R&I is since 1998 governed by the **Agreement for scientific and technological cooperation** between the EU and the US. The agreement has been extended 4 times, last time in 2018, for an additional period of 5 years each time<sup>1</sup>. It highlights the importance of STI for the economic and social development of both the US and the EU, recognises that the US and EU have significant areas of common interest and room for mutual benefit. At the EU-US Summit in June 2021 both sides commitment to renew and reinvigorate the Transatlantic partnership, and to deepen US-EU cooperation with the aim to prepare for future global health challenges, driving forward a sustainable global recovery, protecting our planet, fostering green growth and strengthening technological cooperation.<sup>2</sup>

Moreover, the partnership is supported by the several forums and partnerships, including the EU-US trade and technology council (TTC), EU-US joint technology competition policy dialogue, new transatlantic agenda for EU-US cooperation, All Atlantic Ocean Research Alliance and EU-US-energy council.

The EU-US Joint Consultative Group meeting on Science and Technology Cooperation in Brussels on 12 October 2022<sup>3</sup> called for reinforced cooperation on R&I particularly in the areas of health, energy, oceans and through the EU-US Trade and Technology Council (established 15 June 2021 in Brussels). The meeting confirmed that the EU and the US will keep their commitments from the last summit in June 2021, namely to: (i) end the COVID-19 pandemic, prepare for future global health challenges, and drive forward a sustainable global recovery; (ii) protect our planet and foster green growth; (iii) strengthen trade, investment and technological cooperation; and (iv) build a more democratic, peaceful and secure world. Research and Innovation cooperation is key tool to realise these objectives.

On 13 October 2022 the 2<sup>nd</sup> meeting of the Joint Technology Competition Policy Dialogue (TCPD) took place in Brussels<sup>4</sup>. It had been set up in June 2021, in parallel to the launch of the EU-US Trade and Technology Council (TTC), and focuses on developing common approaches and strengthening the cooperation on competition policy and enforcement in the technology sector.<sup>5</sup> Among others, the discussion focused on: (i) the importance of forward-looking analysis in the field of technology to identify future key markets and issues that may arise in the digital sector (ii) the adoption of effective remedies in digital cases, and (iii) the need to keep merger regulations fit for purpose in a digitalised economy. This is quite a shift to focus on the digitalized sector and aspects whereas the themes in June 2021 focused more on the aim 1) to support collaborative research and innovation exchanges; 2) to explore the possibility of developing a new research initiative on biotechnology and genomics; 3) to deepen cooperation on cybersecurity information sharing and situational awareness, as well as cybersecurity certification of products and software.

A specific arrangement to mention is the EU-US Implementing Arrangement that has been signed by 17 October 2016. The aim of the arrangement was to enable US researchers to cooperate with Horizon 2020 projects outside the framework of the grant agreement (GA) (since many US organisations could not sign a legal document under Belgian law), and to increase cooperation in joint research projects.

<sup>&</sup>lt;sup>5</sup> <u>EU-US launch Joint Technology Competition Policy Dialogue (europa.eu)</u>









<sup>&</sup>lt;sup>1</sup> <u>EUR-Lex - ri0009 - EN - EUR-Lex (europa.eu)</u>

<sup>&</sup>lt;sup>2</sup>U.S.-EU Summit Statement "Towards a Renewed Transatlantic Partnership" (June 2021)

<sup>&</sup>lt;sup>3</sup> EU-US JCG 12 October - Joint Minutes - final 2 (europa.eu)

<sup>&</sup>lt;sup>4</sup> <u>Competition: Second EU-US Joint TCPD (europa.eu)</u>



For Horizon Europe, US legal entities can now be linked to one of the participants in the consortium, thus do not have the legal obligations for reporting and signing the GA which has been preventing many US organisations to participate in the past. This is a change that resulted from many years of the cooperation and discussion.<sup>6</sup>

# 2. United States: National policy initiatives of relevance for MSCA

#### Policies and strategies in R&I and higher education

The US has been deeply involved in the sector of science, technology and innovation (STI) research and development (R&D) for decades, both nationally and globally. In 2020, the US spent a reported 3.5% of its GDP on R&D, ranking 5<sup>th</sup> globally<sup>7</sup>. This reveals a significant prioritisation of R&D in the US government. The US R&D policy is guided by a number of strategic documents, including the National Artificial Intelligence Research and Development Strategic Plan (Update 2019), the Memorandum on the fiscal year 2021 administration R&D budget priorities, the interim National Security Strategy, the National Strategic Overview for Quantum Information Science, the CHIPS and Science Act of 2022<sup>8</sup>, the National Ocean and Atmospheric Administration (NOAA) – Oceanic & Atmospheric research (OAR) 2020-2026 Strategy.

Recently the Inflation Reduction Act (IRA)<sup>9</sup> has been launched in 2022. Amongst others, it shall help to historic deficit reduction to fight inflation, lower energy costs, increase cleaner production, and reduce carbon emissions by roughly 40% by 2030. It is seen as an historic investment that will accelerate the development of climate solutions and pave the way for a zero-carbon, clean energy future and to ensure America remains at the global forefront of innovation. It represents a source of support for new technology to scale up accelerate ongoing upgrades to critical facilities and other national laboratory infrastructure projects, e.g. run by the Department of Energy. The Office of Science received an additional \$1,550,000,000 in Fiscal Year 2022 funding.<sup>10 11</sup>

The US does not have a dedicated research ministry on federal level. The Office of Science and Technology Policy advises the President and his administration on matters of science and technology. Research policies and public R&D funding lie under the responsibility of a wide range of authorities, dedicated ministries, agencies and committees, on several levels including federal and state level but also on the regional and local level (e.g. economic organisation for developments (EOD's). Thus, it is very important to involve actors on all levels in the USA in order to identify yet untapped sources for potential co-funding with MSCA.

<sup>&</sup>lt;sup>11</sup> <u>Fact Sheet: Inflation Reduction Act Supporting the Future of DOE Science | Department of Energy</u> accessed 23.02.23









<sup>&</sup>lt;sup>6</sup> Maria Cristina Russo, Director for Global Approach & International Partnerships at the Directorate-General for Research and Innovation of the European Commission during the Science Business Event on Horizon Europe – first results, 09.02.2022, Session "Shared vision: Is the transatlantic alliance reinventing itself through science and technology?", available under <u>https://www.youtube.com/watch?v=pX6jAlguX8M</u> (26.09.2022)

 <sup>&</sup>lt;sup>7</sup> <u>Research and development expenditure (% of GDP) - United States | Data (worldbank.org)</u>
 <sup>8</sup> The Passage of the CHIPS and Science Act of 2022 - United States Department of State

<sup>&</sup>lt;sup>9</sup> https://www.democrats.senate.gov/imo/media/doc/inflation\_reduction\_act\_one\_page\_summary.pdf

accessed 23.02.23 <sup>10</sup> https://www.energy.gov/science/articles/inflation-reduction-act-invests-us-science-leadership accessed

<sup>&</sup>lt;sup>10</sup> <u>https://www.energy.gov/science/articles/inflation-reduction-act-invests-us-science-leadership</u> accessed 23.02.23



The US's top STI organisations are: Department of Defence (DOD); Department of Energy (DOE); National Aeronautics and Space Administration (NASA); National Energy Technology Laboratory (NETL), National Science Foundation (NSF), National Institutes of Health (NIH), National Institute of Standards and Technology (NIST), National Oceanic and Atmospheric Administration (NOAA), American Association for the Advancement of Science (AAAS), Department of Agriculture (USDA). These organisations, particularly the DOD and the DOE, are also responsible for the implementation of most policies in the realms of public research and research for society<sup>12</sup>.

#### Bilateral agreements and other "competing" mobility programmes for researchers

Several US programmes fund researcher mobility also between EU and US.

Selected researcher mobility programmes

Programme	Outline
International Network of Universities (INU)	A global networking organisation of higher education institutions pursuing innovative international collaboration and exchange. Activities focus on advancing members' opportunities for internationalisation, engaging students and faculty in international mobility programmes, sharing best practices, and supporting international research collaborations.
Fulbright Scholar Programme	A programme designed for international educational and cultural exchange, offering both US and non-US students and scholars the opportunity to research, study, teach, network, and collaborate abroad. Awards more than 1,700 fellowships each year, providing the means for 800 US scholars to research abroad and for 900 non-US scholars to research in the US.
National Association on Foreign Student Affairs (NAFSA)	Non-profit association dedicated to international education and exchange. Aids students, scholars, and practitioners seeking international education. Establishes principles of good practice, provides professional development opportunities and networking, holds conferences, and promotes research.
International Research Experiences for Students (IRES) by the National Science Foundation (NSF)	Supports international research activities for US science and engineering students. Focuses on undergraduate/graduate students' mobility and involvement in high-quality international research, education, and professional development experiences, in order to enhance US leadership in science and engineering research and education, as economic competitiveness.
EducationUSA by the US Department of State	Network involving hundreds of international students advising centres. Designed to promote US higher education for foreign students by offering accurate, regular, and comprehensive information about opportunities to study in the US.
Council on International Educational Exchange (CIEE)	Offer students, teachers, and young professionals around the globe comprehensive information on international exchange programmes and services, offering scholarships to study abroad

<sup>&</sup>lt;sup>12</sup> United States | STIP Compass (oecd.org) accessed 14.02.23













custom programmes gap years, internships, work exchange programmes, and professional development conferences and networks. Largely geared towards high school students.

#### National funding opportunities in support of MSCA

Currently there are no MSCA dedicated funding opportunities in place, e.g. like in Canada the Mitacs-RISE/SE Co-funding. High potential candidates are however the Fulbright Scholars Programme and programmes by NSF for MSCA Staff Exchanges or Co-Funding and dialogues between those and the EC are ongoing.

Fulbright-Schuman<sup>13</sup> offers fellowships to American and European PhD candidates, researchers and lecturers to carry out research or post-graduate studies at a European or American University in the

field of US-EU relations. The Fulbright-Schuman Programme is jointly financed by the European Union and is open to citizens of all EU member states and to U.S. citizens with two years of relevant experience. The Fulbright-Schuman Programme is administered by the Fulbright Commission in Brussels and is jointly financed by the U.S. From 2014 to 2020, the annual selections have resulted in grants for some 90 Europeans and 60 US nationals.

A consecutive analysis on EU MS bilateral programmes would be of interest. A guide/mapping of existing tools and services as well as service providers for European research and innovation actors present in the US or seeking to internationalise towards the US has been undertaken in 2017 through the ENRICH in the USA project, available online<sup>14</sup>. It features a list of US federal organisations and non-federal/private funders (e.g. foundations) that provide grants for scientific research, education programmes, and artistic works across a range of disciplines and fields of study, as well as a list of EU MS/Associated Countries Liaison Offices in the US and/or supporting means mentioned for internationalisation of STI by EU MS/AC funding agencies (e.g. by Austria, France, Denmark, Israel, Greece, Norway, Spain, Sweden). A dedicated analysis on especially MSCA leveraging purposes would be needed in the future.

<sup>&</sup>lt;sup>14</sup> <u>D1.1 Mapping of existing tools and services service providers public2.pdf (enrichintheusa.com)</u> accessed 27.02.23









<sup>&</sup>lt;sup>13</sup> https://ec.europa.eu/assets/eac/erasmus-plus/factsheets/regional/uscanada-regional-erasmusplus-2020.pdf accessed 23.02.23



# 3. United States: Participation and mobility patterns of MSCA in H2020

#### MSCA participation in H2020

The US has had the highest level of participation in EU R&I programmes of all non-EU countries for years<sup>15</sup>. In terms of participation in MSCA projects, it has the highest ranking of all countries, most notably of the seven industrialised countries in its group. Within its group, the US ranks second place in terms of involvement in RISE, ITN, and COFUND projects, behind Switzerland. From 2014-2020, 836 US researchers were funded by MSCA, with the US having had the third most third country national researchers participating in MSCA H2020 (after China and India). The participation trend from the US over H2020 is negative, Co-funds are only accounted for in the first three years (2014 – 2016), for ITN/DN we see no participation anymore in 2019 and 2020. RISE actions are relatively stable with participation peaks in 2015 and 2017. With regard to IF, a total of 804 US nationals participated in this type of action. This is by far the highest participation number among the countries monitored and leaved the US in the top position yet again.

Mobility: In the last two years 2019 and 2020, year the numbers coming from the US to Europe are declining, due to most likely COVID. Researchers going to US there was a massive peak in 2015 (with 794 (almost a third of overall H2020 numbers) going from EU to the USA.

330 different US organisations participated in MSCA. The success rate of US applicants to MSCA was 19.93%. The US accounts for 34,7% of all MSCA non-EU participations under H2020.

In terms of the US's potential, it is also performing well, maintaining the same top rankings in relation to its group among industrialised countries (Australia, Canada, Japan, Republic of Korea, New Zealand, Switzerland, US). However, when compared to all groups, there is a significant change and the US declines in the rankings. Thus, although the US is performing well in comparison with its group, it is clear that it is not participating to its full potential. Also, compared to the huge investments in the US in Research and Development (GERD, the participation in MSCA could have even more potential. A more strategic promotion of MSCA in the US should focus on fully utilising opportunities for exchange and participation by increasing the availability of information on MSCA, as well as its visibility.

During the H2020 time period, 2415 researchers went to US organisations through MSCA, with the US being a leading first choice destination for both EU and third country researchers, followed, by a large margin, by Australia and Canada. The US thus has a positive flow of researchers, meaning that more researchers enter the US than exit. The study also showed that the US was the leading destination for MSCA Horizon2020 researchers from third countries as well as from the EU<sup>16</sup>.

Administrative processes related to Horizon 2020 and MSCA grants are perceived as excessive compared to US systems, and US researchers had issues with acquiring a license for work in a non-European country. Specifically addressing these challenges may increase US researchers' participation in MSCA under Horizon Europe. In addition, providing more flexibility regarding researchers' access to funds may increase their mobility and motivation to participate.

In 2018, via the roadmap for EU-US science and technology cooperation, the US and EU defined scientific fields in which joint policy making and cooperation is to be pursued. These include

<sup>&</sup>lt;sup>16</sup> MSCA USA country profile











<sup>&</sup>lt;sup>15</sup>https://ec.europa.eu/info/research-and-innovation/strategy/strategy-2020-2024/europe-world/internationalcooperation/united-states en\_accessed 23.02.23



bioeconomy, health research, marine and arctic research, and research in various fields of transportation technology. This guideline was defined within H2020, which lasted from 2014-2020, and although it was released in the mid- to late stages of the programme, it most likely had some influence on participation in MSCA under H2020. There is a clear and high overlap between the fields most frequently reported in MSCA projects and the scientific fields outlined as priorities for cooperation between the US and EU. 41% of MSCA projects were in the natural sciences, which is strongly in alignment with the EU-US S&T cooperation priorities of bioeconomy and marine and arctic research. However, it is the second most frequent field of MSCA projects, engineering and technology, that has the most correlation with joint research priorities, including transportation research, materials research, road automation, and other transport system improvements. This field has a frequency of 23%; although this percentage is not very large, the first most frequent field reported in MSCA projects, the natural sciences, is also a key research priority. Social sciences, humanities, and agricultural sciences had the lower frequency of MSCA projects, and were not prioritised in the scientific fields defined at policy dialogue level. These data point to a strong correlation between EU-US R&D and policy priorities, and MSCA project focuses.

#### Participant organisation in MSCA

In detail, the top 20 research entities according to the Scimago ranking of the world's best research entities are presented.

The vast majority of US organisations participating in MSCA are from the academic sector (~85%). Just under 15% are non-academic. Within the academic sector, five organisations dominate: Stanford University, Harvard University, Massachusetts Institute of Technology, Columbia University and John Hopkins University.

At current stage only 45% of the country's top research excellence organisations (according to Scimago) are involved in MSCA at all. These organisations, together with the organisations only participating at a low level offer great opportunities for a better placement of MSCA.

Harvard Medical School	Howard Hughes Medical Institute
National Institutes of Health	Veterans Affairs Medical Centers
University of Michigan, Ann Arbor	Broad Institute of MIT and Harvard
American Cancer University	

The Times Higher Education Index with reference year 2020<sup>17</sup> (in accordance with Scimago-analysis and H2020) shows that 40 US universities are amongst them (with rank).

<b>F</b>	
<ul> <li>2 – California Institute of Technology</li> </ul>	• 48 – University of Illinois at Urbana-
• 4 – Stanford University	Champaign
• 5 - Massachusetts Institute of Technology (MIT)	• 51 – University of Wisconsin-Madison
• 6 – Princeton	• 52 – Washington University in St Louis
• 7 – Harvard University	• 53 – Brown University
• 8 – Yale University	• 54 – University of North Carolina at
• 9 – University of Chicago	Chapel Hill
• 11 – University of Pennsylvania	• 55 - University of California, Davis
• 12 – Johns Hopkins	• 57 – University of California, Santa
• 13 – Berkeley (tied w. ETH)	Barbara
• 16 – Columbia University	• 61 – Boston University

<sup>&</sup>lt;sup>17</sup> https://www.timeshighereducation.com/world-university-rankings/2020/world-ranking accessed 14.02.23













• 17– University of California	• 62 – University of Southern California
• 19 – Cornell University	• 70 – Ohio State University (Main
• 20 – Duke University	Campus)
• 21 – University of Michigan-Ann Arbor	• 78 – Penn State (Main Campus)
• 22 - Northwestern University	• 79 – University of Minnesota
• 26 – University of Washington	• 80 – Emory University
• 27 – Carnegie Mellon University	• 84 – Michigan State
• 29 – New York University	• 88 – Purdue University of West Lafayette
• 31 – University of California, San Diego	• 91 – University of Maryland, College
• 38 – Georgia Institute of Technology	Park
• 38 – University of Texas Austin (tied with	• 94 – Dartmouth College (tied with
Georgia Institute of Technology and École	University of Basel)
Polytechnique Fédérale de Lausanne)	• 96 – University of California, Irvine

Out of these 40 universities, 11 Universities had not been listed as MSCA beneficiary under H2020, making it good candidates to reach out for MSCA information and (at a later stage) checking if anything has changed for Horizon Europe. The institutions not listed range from the higher rankings to the lower rankings (no pattern can be seen here). These institutions are:

Princeton	University of Wisconsin-Madison
Johns Hopkins	• University of California, Santa Barbara
University of Michigan-Ann Arbor	Penn State (Main Campus)
New York University	• Dartmouth College (tied with University
University of California, San Diego	of Basel)
University of Illinois at Urbana-Champaign	University of California, Irvine

#### Involvement of private sector in MSCA

The **US led the list in third-country business participations in H2020 MSCA**, with 41.3% of the 196 participations, followed by China and South Africa (~9% private for-profit organisations). These numbers mainly consist of large organisations focusing on R&D. These large participating companies were mainly motivated by the opportunity to expand their network and acquire contacts in leading European research organisations. Only very ~1% SMEs were involved. In over one third of cases, the third country organisations that EU businesses cooperated with were organisations from the US. US participation in the MSCA thus reflects the EU R&I international cooperation strategy, which emphasises the importance of new business opportunities, access to new markets, and global approaches to issues.

**Enterprise Europe Network USA** (EEN USA) works closely with both US and European colleagues to advance opportunities for SMEs by providing business and innovation support services that help to strengthen companies' competitiveness and sustainability. There are even three dedicated chapters in the USA through American based partners: (1) European American Chamber of Commerce Texas (EACCTX) in Addison, (2) European-American Business Organisation, Inc. (EABO) in New York and (3) European American Enterprise Council (EAEC) in San Francisco.<sup>18</sup>

<sup>&</sup>lt;sup>18</sup> <u>https://een.ec.europa.eu/local-contact-points/us</u> accessed 14.02.23













Another EU entry point for innovators, entrepreneurs, startups and SME is the initiative **European Network for Research and Innovation Centers and Hubs (ENRICH) in the USA**, which provides collaboration, funding and commercialisation support services to Europeans and EU Associated Countries. It features a network from three US centres, San Francisco, Washington D.C. and Boston with a headquarters in Philadelphia and various additional landing hubs throughout the US.<sup>19</sup>

Thus far, no MSCA information or promotion was found through desk research with these three EEN USA organisations or ENRICH in the USA. However, they could be potential stakeholders to contact as a next step if even further business/SME participation in MSCA is favoured.

### 4. United States: MSCA promotion activities and opportunities

To facilitate research cooperation between the US and the EU, there are several contact points for researchers in both countries. These provide networking opportunities, information on career development and research funding, and guidance on collaboration. **ENRICH in the USA** offers services to connect European R&I, technology, and business organisations with the US, and provides services to address the resource gaps preventing access to research cooperation. National Council for University Research Administrators (**NCURA**) also acts as an entry point for questions related to participation in Horizon Europe. **EURAXESS Worldwide (EWW) North America** is a consistent and reliable networking platform and information tool that helps researchers from North America develop careers in Europe, manages the European scientific diasporas in North America initiative, organises events, and actively promotes the MSCA. Some NCPs in Europe also provide information for US researchers. Despite this, there is no official MSCA-NCP in the US, and the resources that US researchers have to access information about the MSCA are limited. This lack of programmes providing guidance to US researchers leads to a lack of visibility and US engagement in MSCA.

Gaps in which US stakeholders are not fully addressed, thus reducing the potential for the instruments to be fully supportive of MSCA promotion, primarily involve this lack of programmes providing visibility of the MSCA in the US mobility to US researchers, thus perpetuating a lack of information available about the programme.

Opportunities offered by policy instruments to strengthen US participation in the MSCA largely involve networking and collaboration opportunities. New research opportunities are provided through the MSCA, due to new technologies and networks present on each side. A key added value of the MSCA is that research collaborations that it supports are sustainable; even after the end of their MSCA projects, researchers often continue to publish with peers or supervisors that they met during their MSCA fellowship.

One respondent to the online survey issued by MSCAdvocacy stated that MSCA's prestige and competitiveness, combined with being a non-privately funded programme, makes it attractive for host universities as well as researchers, particularly those interested in a career abroad. In the respondent's opinion, the greatest benefit of MSCA has proven to be that it provides access to an expanded international network.

The respondent stated that they are unaware of any MSCA promotion on the part of the US government; rather, it is increasing access to information on MSCA for institutions and professional organisations that increases participation by US organisations and researchers. They are also unaware of any existing synergies between MSCA and other EU/US funding or programmes. The respondent added that NCURA and EURAXESS are the institutions which most support MSCA promotion, although

<sup>&</sup>lt;sup>19</sup> <u>https://www.enrichintheusa.com/</u> accessed 14.02.23









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Harvard has also been called on to provide guidance and information for researchers regarding MSCA. The respondent suggested that the thematic areas of health and climate change are of strategic national relevance to the US, and should be better promoted in R&I joint priorities. They also stated that although they are unaware of existing co-funding opportunities in the US, there may be useful synergies between NIH programmes and MSCA.

The respondent suggested the following policy additions be considered and implemented in order to increase MSCA's visibility and improve NCURA's and EURAXESS's promotion of the programme: "Emphasize more programming targeting the benefits and opportunities for MSCA specifically. 'Toolkits' both for interested researchers and administrators at non-EU institutions that account for eligibility, roles, process, terminology, etc. and are made widely available could also be helpful."

The survey has shown that participants in MSCA hail it as a prestigious, competitive, beneficial programme for US researchers and host institutions. However, MSCA promotion in the US is largely carried out by NCURA, EURAXESS, and individual universities and organisations, with little synergy and no NCP for the MSCA, thus it is not being supported to the fullest possible extent.

Since 1985 the **Erasmus programme** has funded just over 2000 projects for bilateral partnerships that organise mobility for almost 8900 students, researchers, and staff<sup>20</sup>. Estonian mobility schemes with US and Canada include agreements between the Tallinn Arts Academy with design schools in and Rhode Island and in Vancouver, where it sent four students and received nine. Tartu University has student and staff exchange with universities in Kentucky, Michigan, San Diego, and the University of West Virginia in Morgantown: here it sent seven and received two students/staff.<sup>21</sup> From 2014 to 2020 there were 194 instances of North American (Canada and the US) institutional participation in Erasmus Mundus. Top full partner from the US is the University of California.<sup>22</sup> These US Universities could be a good opportunity for MSCA promotion and to see if their students are also interested to "follow-up" on their ERASMUS programme.

Regarding Erasmus+, during 2021 and 2022 combined, the US served as a coordinator country in 37 projects from which all of them were Jean Monnet Activities<sup>23</sup>, and participated as partner country in 38 projects from which 7 were Jean Monnet Activities, 7 Learning Mobility of Individuals, 21 Partnerships for cooperation and exchanges of practices and 3 in Sport<sup>24</sup>.

Between 2015 and 2022 the USA participated in 129 COST actions as coordinators<sup>25</sup>.









<sup>&</sup>lt;sup>20</sup> <u>https://ec.europa.eu/assets/eac/erasmus-plus/factsheets/america-caribbean/canada\_erasmusplus\_2020.pdf</u> accessed 31.01.23

<sup>&</sup>lt;sup>21</sup> <u>https://ec.europa.eu/assets/eac/erasmus-plus/factsheets/regional/uscanada-regional-erasmusplus-2020.pdf</u> accessed 23.02.23

<sup>&</sup>lt;sup>22</sup> <u>https://ec.europa.eu/assets/eac/erasmus-plus/factsheets/regional/uscanada-regional-erasmusplus-2020.pdf</u> accessed 31.01.23

<sup>&</sup>lt;sup>23</sup> https://erasmus-

plus.ec.europa.eu/projects/search/?page=1&sort=&domain=eplus2021&view=list&map=false&coordinatorCoun try=united+states US&activityYears=2021--2022&searchType=projects accessed 30.01.2023.

<sup>&</sup>lt;sup>24</sup> https://erasmus-

plus.ec.europa.eu/projects/search/?page=1&sort=&domain=eplus2021&view=list&map=false&partnerCountry= united+states US&activityYears=2021--2022&searchType=projects accessed 30.01.2023.

<sup>&</sup>lt;sup>25</sup> <u>https://www.cost.eu/search/USA/page/15/?post\_type=cost-action&orderby=publish\_date&order=DESC</u> accessed 18.01.2023



## 5. United States: Other relevant information

The US is an incredibly valuable partner for international collaboration for the EU, with many areas of joint research and policy priorities, a rich history of cooperation, and the US's role as a leading actor in R&D in STI, and other areas. Thus, further participation of US organisations and individual researchers in the Marie Skłodowska-Curie Actions is strongly encouraged. Above all, there is a significant amount of thematic cooperation in the joint priority fields, in which extra workshops were held. Focusing on these areas of joint priority is one of the most productive policies and techniques. Examples of best practices of MSCA promotion in the US include the following below and could be followed-up with:

- EU-US-Canada Trilateral Workshop on Cooperation in Marine and Arctic Research Infrastructures in Halifax<sup>26</sup>
- Transatlantic Research Cooperation to Treasure and Protect the Atlantic Ocean<sup>27</sup>
- Trans-Atlantic Symposium on ICT Technology and Policy, Minneapolis, USA<sup>28</sup>
- Modelling the European power sector evolution: low-carbon generation technologies (renewables, CCS, nuclear), the electric infrastructure and their role in the EU leadership in climate policy<sup>29</sup>

Novel Green Polymeric Materials for Medical Packaging and Disposables to Improve Hospital Sustainability<sup>30</sup>.

### 6. United States: Key messages

A main obstacle identified with regard to the US participation in MSCA is that from the US-perspective the EU is often seen as a small continent and that US organisations have many options for partners worldwide and do not depend on European partners. Furthermore, many US researchers and organisations do not know of EU funding possibilities open for US applicants. If they do know of the opportunities in general, a deeper understanding e.g. with regard to legal modalities and application procedures is often lacked. Subsequently, mobility-related administrative obstacles (such as signing the GA under Belgian Law or how to become an affiliated partner) should be targeted more in the promotion around MSCA.

To further increase the visibility of the MSCA, the multipliers and promotors of the programme in the US should be diversified. For example, the could synergise with groups such as the Joint Consultative Group of the US, the EU-US Space Dialogue, the Transatlantic Ocean Research Alliance, and the US-EU Energy Council. The appointment of an official MSCA NCP in the country would be hugely beneficial. EUDEL in D.C. or DG EAC could possibly investigate if a small contract of the European Commission's Global Service Facility could be utilised as financing instrument for the establishment phase. Additionally, the support of MSCA-Net could be exploited. Starting points for investigation of suitable organisations include the US State Department and US research organisations/universities with high participation rates in MSCA. Some have already expressed interest on being an information point in the past and NCURA expressed interest during a telco with DLR. A good example to follow in this process subsequently would be the EU project BILAT USA 4.0 which had successfully established and trained two US information points (American Chemical Society and Consortium for Ocean Leadership). NCURA

<sup>&</sup>lt;sup>30</sup> Search | CORDIS | European Commission (europa.eu)











<sup>&</sup>lt;sup>26</sup> News | BilatUSA 4.0 (euussciencetechnology.eu)

<sup>&</sup>lt;sup>27</sup> News | BilatUSA 4.0 (euussciencetechnology.eu)

<sup>&</sup>lt;sup>28</sup> <u>News</u> | BilatUSA 4.0 (euussciencetechnology.eu)

<sup>&</sup>lt;sup>29</sup> <u>Search | CORDIS | European Commission (europa.eu)</u>



served as informal information point for coordinating the network as well as legal and financial requests. The US State Department did not want to call it an NCP, but an information point.

The topic of visa granting / work permits granting including related topics such as health insurance for researchers from the US should be put to the agenda at EU-US Joint Consultative Group meetings.

In order to strengthen co-funding mechanisms at policy level it is advised to talk to funders on all levels (federal, state, regional, local and even city/town) as in the US funding is usually theme related.

Existing European projects such as ENRICH in the USA or EEN USA could be leveraged as a potential support, especially for the private sector outreach.













### 7. United States: Annex

#### MSCAdvocacy survey

**Objective:** The objective of this survey is to collect information from key informants on developments in national and bi-lateral/regional R&I joint priorities and level of coordination among cooperation mechanisms (info relays, training, co-funding schemes) relevant to MSCA.

#### <u>Terminology</u>

R&I: research and innovation

**S&T**: Science and Technology

**MSCA**: Marie Sklodowska-Curie Actions- Staff Exchanges, Doctoral Networks, Postdoctoral Fellowships, COFUND, MSCA and Citizens

Cross-sectoral: academic/non-academic

Objective: Acquire information on relevance of bi-lateral/regional R&I cooperation joint priorities towards MSCA

- 1. Based on your experience/knowledge, can you indicate any developments in bi-lateral/regional R&I cooperation that are of relevance towards MSCA in your country/region?
- 2. What are the thematic areas (if any) that you consider of strategic national relevance and should be better promoted in R&I joint priorities? In which strategic plans are they reflected?
- 3. What are the national strategic priorities that are receiving particular attention from funding agencies in your country/region? Where do you see the national funding gaps, if any, in relation to national strategic priorities? Please specify the sources of funding (e.g. local/regional/other bodies, public/private organisations, economic development agencies, etc.)
- 4. What are the co-funding initiatives in your country that could promote participation in MSCA? Please express if any specific MSC Action should be targeted.
- 5. Is MSCA perceived in your country R&I cooperation policy as a good practice example for research mobility?

Objective: Acquire information on potential opportunities that improved researcher mobility can bring to MSCA

- 1. To what extent have recent national and bi-lateral R&I cooperation developments improved mobility framework conditions (e.g. visa application process, excess of bureaucracy, insufficient living allowances, job security uncertainty on return, working conditions, language barriers, etc.) removing some existing barriers to participation in MSCA?
- 2. Are there, in your country, any competing R&I programmes promoting mobility? Please give details and suggest what kind of synergies you find possible to explore.
- 3. According to the benefits that internationalization of research, based on mobility, can bring to your country/region through MSCA (e.g. better international networks, more research outputs,











higher-quality outputs and better career outcomes), do you consider that a specific MSC Action can better suit the purpose and be more encouraged/promoted than others? Please, justify your answer.

Objective: Acquire information on potential opportunities for MSCA that can derive from crosssectoral mobility

- 1. Have any national incentives for academia-industry interaction been provided?
- 2. To what extent is cross-sectoral mobility (e.g. joint training programmes are provided for better responding to future employment needs, researchers are provided with entrepreneurship and research management skills, internships are part of academic curricula, etc.) addressed by any national funding? If yes, can any synergies with MSCA be explored? Please give details.

Objective: Acquire information on how national and bi-lateral/regional R&I cooperation instruments promote visibility of MSCA

- 1. To what extent measures to address coordination of communication activities among National Contact Points, EURAXESS offices, S&T Counsellors and EU Delegations have been developed for MSCA?
- 2. To what extent has the development of skills related to participation in MSCA (e.g. grant writing, knowledge of Horizon Europe, networking, etc.) been promoted/provided in your country/region?
- 3. Considering the MSCA participation data of your country, how can information networks, e.g. NCPs, EURACCESS, be improved to increase awareness of MSCA?
- 4. Have any synergies been promoted in your country/region between MSCA and other EU and/or national funding/programmes (e.g. Erasmus+)? Please give details.

United States: Country data in H2020 (data status: 2023-01-27) (data status: 2023-01-23)										
		Contracted Projects						Researchers flows: total no including COFUND, ITN, RISE and IF		
	Call deadline year	MSCA- COFUND	MSCA-ITN / MSCA-DN	MSCA-RISE/ MSCA-SE	MSCA-IF/ MSCA-PF	TOTAL (IF included)	TOTAL (IF not included)	5a. Number of researchers of nationality 'United States' coming to EU/AC	5b. Number of researchers recruited from country 'United States' coming to EU/AC;	5c. Number of researchers incoming to country 'United States'
Horizon 2020	2014	4	25	25	100	154	54	107	137	378
	2015	7	11	38	98	154	56	137	177	794
	2016	6	20	25	103	154	51	134	160	329
	2017		33	35	98	166	68	110	110	399
	2018		31	22	129	182	53	124	89	325
	2019			26	125	151	26	100	71	163
	2020			24	151	175	24	78	56	249
	H2020 total	17	120	195	804	1.136	332	790	800	2.637
H2020 (2019-20) /										
H2020 (2014-15)										
TRENDS		-100%	-100%	-27%	5%	-18%	-64%	-27%	-60%	-65%
GERD/GDP to total										
projects in H2020										
POTENTIAL		0.05	0.35	0.57	2.33	3.29	0.96			
Global Innovation Index							3			











#### **Useful Links**

For more information & learn how to get involved in in the EU-USA R&I cooperation

Visit the Marie Skłodowska-Curie Actions website to explore all the opportunities offered by the programme

EURAXESS North America provides support services for professional researchers, including hosting offers, PhD and postdoctoral vacancies funded by the MSCA

Join the North America Chapter of the Marie Curie Alumni Association to communicate, to share, to help, and to get help

Support for existing and future MSCA National Contact Points

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