



Guide for Canadians on  
Multilateral Cooperation  
with Europe

GUIDE FOR CANADIANS



## Table of Contents

Aim of this guide .....	2
Structure of this guide .....	2
BACKGROUND AND CONTEXT .....	2
CHAPTER 1: ERA-NETS .....	5
1.1 ERA-NET NEURON II .....	6
1.2 E-RARE 3 .....	7
1.3 GENDER-NET.....	7
CHAPTER 2: JOINT PROGRAMMING INITIATIVES (JPIs).....	9
2.1 Neurodegenerative Disease Research [JPND].....	10
2.2 A Healthy Diet for a Healthy Life [HDHL].....	11
2.3 Antimicrobial Resistance [JPIAMR] .....	12
2.4 More Years, Better Lives - The Potential and Challenges of Demographic Changes [JPI MYBL].....	12
2.5 Agriculture, Food Security and Climate Change [FACCE-JPI] .....	13
CHAPTER 3: ARTICLE 185 INITIATIVES.....	14
3.1 Active and Assisted Living [AAL].....	15
CHAPTER 4: EUREKA.....	16
CHAPTER 5: THE TRANS-ATLANTIC PLATFORM [T-AP] .....	18
CHAPTER 6: THE BELMONT FORUM .....	19
CHAPTER 7: OTHER CANADIAN FUNDING ALIGNMENT INITIATIVES .....	20
7.1 General Granting Council Funding .....	20
7.2 Coordinated Calls.....	20
7.3 Provincial Funding .....	20
7.4 University Funding.....	20
7.5 Public-Private Partnerships [PPPs].....	21
ANNEX I: Countries Participating in Initiatives Outlined in this Guide.....	23
ANNEX II: List of Acronyms .....	25
Methodology .....	26
ERA-Can+ project .....	26



## AIM OF THE GUIDE

This *Guide for Canadians on Multilateral Cooperation with Europe* is intended to help Canadian researchers and innovators identify and access funding for collaboration with Europeans beyond the European Commission's (EC's) funding available through Horizon 2020. The guide describes opportunities open to Canadians through: ERA-NETs, Joint Programming Initiatives (JPIs), Article 185 Initiatives, EUREKA, the Trans-Atlantic Platform (T-AP), the Belmont Forum, and other Canadian funding alignment initiatives. Canadian funding agencies (at the national, provincial and organizational levels) support Canadians' participation in these initiatives. The opportunities for Canadians presented in this guide are not exhaustive and new opportunities may arise in the future.

## STRUCTURE OF THE GUIDE

This guide outlines seven categories of multilateral cooperation opportunities open to Canadian researchers and innovators. Each chapter describes one of the categories and corresponding initiatives and provides information on calls for proposals when available and links to additional resources.

A list of the countries participating in many of the initiatives described in this guide is provided in Annex I.

## BACKGROUND AND CONTEXT

### Canada-EU collaboration

2016 marks the 20th anniversary of the signing of the "Agreement for Scientific and Technological Cooperation between Canada and the European Community" and collaboration in research and innovation remains a priority for Canada and the European Union (EU). Our shared histories, similar scientific cultures and many joint initiatives (with the EU and Member States) have created a powerful foundation for addressing strategic challenges together.

### Canadian participation in Horizon 2020

Horizon 2020 is the EU's Common Strategic Programme for Research and Innovation. It is the largest EU Research and Innovation program ever with nearly €80 billion of funding available over seven years. From 2014 to 2020, Horizon 2020 will fund peer-reviewed research in all sectors and at all points in the value chain from fundamental research, to infrastructure and training, to commercialization. It promises "breakthroughs, discoveries and world-firsts by taking great ideas from the lab to the market." Horizon 2020 is administered by the EC and is considered the eighth in a series of research Framework Programmes (FP), first launched by the EC in 1984.

The *Guide to Canadian participation in the European Union's Framework Programme for Research and Innovation (2014-2020)* published by ERA-Can+ describes the Horizon 2020 architecture and identifies opportunities for Canadians to participate in the program. It outlines for example, how Canadians can access EC funding for European Research Council grants and Marie Skłodowska-Curie grants and also describes how Canadians can participate in collaborative projects addressing societal challenges. Horizon 2020 collaborative project calls for proposals require the participation of at



## BACKGROUND AND CONTEXT

least three researchers/innovators from three EU Member States or Associated Countries and they are all eligible for EC funding. Project proposals can also include participants from what the EC refers to as ‘third countries’ like Canada but they are funded only under specific circumstances, namely: when a provision is made in the call text; when the Commission deems participation essential [determined on a case-by-case basis]; or when an agreement exists between funding bodies.

Canadian researchers and innovators have been relatively successful in the first two years of Horizon 2020 [2014-2015], with a Canadian applicant success rate [24%] that is significantly higher than the average third country [17%] and European applicant success rates [15%]. While most Canadian researchers and innovators participating in the Horizon 2020 collaborative projects do not receive EC funding, over the last two years, the EC has contributed to €870,000 to Canadian participants. The Horizon 2020 projects with Canadian participation have reflected priority thematic areas for Canada-EU collaboration in science, technology and innovation, including aeronautics, health, marine sciences, information communication technology, and researcher mobility.

### An overview of the multilateral initiatives

This current guide describes multilateral opportunities for EU-Canada cooperation that are open to Canadians and supported by Canadian funding agencies. The guide presents seven categories of initiatives.

The broad goals of all the EU-Canada initiatives described in the guide are to pool national research efforts, share cross border expertise, reduce duplication of work, tackle common societal challenges more effectively, and maximize the impact of public research and development resources.

**ERA-NETs, JPIs and Article 185 Initiatives** involve public to public partnerships [P2Ps] under the Horizon 2020 framework where public sector bodies at the local, regional, national or international level commit with the EC to jointly support the development and implementation of a research initiative or activity. They develop joint research agendas and launch joint calls for proposals, which are then open to researchers and innovators from participating countries.

While some of these initiatives are open only to European Union Member States and Associated Countries, a number allow participation from countries outside Europe, like Canada. Openness to other countries is usually defined by the steering committee or management board of the initiative. ERA-NETs, JPIs and Article 185 initiatives define multiple levels of partner country engagement from full membership, to associate membership and partnership.<sup>1</sup> Full membership normally entails a seat on the management board of the initiative as well as voting rights in determining research

<sup>1</sup> Note that “associate membership and partnership” for ERA-NETs, JPIs and Article 185 initiatives are not to be confused with “Associated Countries”. According to the EC, Associated Countries are: Albania, Bosnia and Herzegovina, Faroe Islands, Former Yugoslav Republic of Macedonia, Iceland, Israel, Moldova, Montenegro, Norway, Serbia, Turkey. These “Associate Countries” are eligible for funding under Horizon 2020.



## BACKGROUND AND CONTEXT

priorities and general management directions. Associate membership and partnership do not normally grant voting rights to a country, but may allow their funding agencies to participate in joint calls launched through the initiative. Canadian funding agencies are active in P2Ps as full members or associate members, depending on the initiative.

**EUREKA** aims to bring together industry, research institutions and financial resources to develop new technologies for innovative products, processes and/or services. Fourty European countries, the EC, as well as Canada, South Korea and South Africa participate in EUREKA. National agencies fund EUREKA initiatives.

The **Trans-Atlantic Platform (T-AP)**, formed during the EC's FP7, is a collaboration between key humanities and social sciences funding organizations in 12 countries in South America, North America and Europe. The EC is the primary funder of T-AP.

The **Belmont Forum**, which has not been part of the EC's framework programmes, is composed of members from around the world that support global environmental change research. National funding agencies contribute to this initiative as does the EC.

Beyond the above mentioned initiatives, there are several **other Canadian funding alignment opportunities** that Canadian researchers and innovators can access to collaborate with Europeans. For example:

- + The Granting Councils (SSHRC, CIHR, NSERC) have certain programs that while not specifically targeting EU-Canada research, enable Canadian researchers to use their grants for this purpose.
- + There are occasionally coordinated calls between the EC and non-European funding agencies under Horizon 2020. The EC and Canada have launched one coordinated call to date in the field of aeronautics. Further calls may be launched in the future.
- + The government of Quebec is funding their researchers and innovators to collaborate with Europeans on Horizon 2020 projects and others. Other provinces may also contribute from time to time.
- + Certain Canadian universities are funding their researchers' participation in Horizon 2020 and other Canada-EU collaborations.
- + Public-Private Partnerships (PPPs) under the Horizon 2020 framework are forms of cooperation between public authorities and businesses. A number of PPPs are open to funding agencies from non-European countries. While there are currently no Canadian funding agencies participating in PPPs, Canadian researchers and innovators may wish to monitor developments in this area. Canadians can still apply to PPP calls for proposals in accordance with regular Horizon 2020 rules and procedures and seek EC funding.

Further introductory information about P2Ps and PPPs can be found on the [European Commission's website](#) and on [ERA-Learn 2020](#) [much of the information in this guide is drawn from these sites]. Their calls for proposals are often advertised on the [European Commission's Research and Innovation participant portal](#).



## CHAPTER I ERA-NETs

**Objectives and typical activities:** The European Research Area Networking (ERA-NET) scheme aims to develop and strengthen the coordination of national and regional research programs. There have been three actions under this scheme:

- + ERA-NETs [launched in FP6 and FP7]: provide a framework for national and regional authorities implementing research programs to coordinate their activities through, for example, the networking of program managers, systematic exchanges of information and best practices, the formulation of joint strategies and work programs for the long term, joint programming, monitoring and evaluations, and/or through the implementation of joint calls to support transnational proposals.
- + ERA-NET Plus actions [from FP7]: usually built on successfully completed ERA-NETs, provide EC top-up funding for joint calls for proposals.
- + ERA-NET Cofund [Horizon 2020]: represents the merging of the ERA-NET and ERA-NET Plus schemes under the new Horizon 2020 framework with a mandatory transnational call for proposals with top-up funding from the EC.

**Participants:** Ministries or regional authorities and/or program owners such as research councils or funding agencies.

**End-users:** All types of research entities [industry, academia, etc.].

**Implementation:** ERA-NETs are defined by the EC to align with its defined research priorities and new ERA-NET Cofund actions are proposed in the Horizon 2020 work programs. The EC launches calls for proposals to seek consortia of national/regional bodies to implement ERA-NETs. ERA-NET procedures are then defined in a Consortium Agreement signed by participating funding agencies.

**Funding:** The EC contributes to ERA-NET coordination and management activities and to the topping-up of transnational research programs for ERA-NET Plus actions. In 75% of all call budgets, countries and regions pay for their own participants. There are cases where countries pool funds and there are transnational flows of funds.

**Timeframes:** ERA-NET actions normally last three to five years, ERA-NET Plus actions last up to five years, and ERA-NET Cofund actions are set for five years.

**Joint calls for project proposals:** Projects funded through the ERA-NET scheme are selected through a two-step process following a joint transnational call for proposals. First, the national or regional funding body reviews the applications from their country to ensure they meet their funding criteria and then an international peer review committee reviews eligible proposals. Projects funded through the ERA-NET Cofund scheme must involve at least two entities from two different EU Member States or Associated Countries. Entities from non-European countries can also be part of a project if their national or regional funding agencies are participating in the ERA-NET. More than 350 calls were implemented by ERA-NET and ERA-NET Plus schemes between 2004 and 2014.



## CHAPTER I

**Canadian participation:** Canada is a participating member in some ERA-NETs [from FP6 and FP7] and ERA-NET Cofund actions. The following active ERA-NETs allow Canadian participation: ERA-NET NEURON II, E-RARE 3, GENDER-NET.

The following Joint Programming Initiatives [explained in chapter 2] benefit from ERA-NET Co-funding and are open to Canadians: JPND, FACCE JPI, and JPIAMR.

*Sources:*

[http://ec.europa.eu/research/era/ERA-NET\\_en.html](http://ec.europa.eu/research/era/ERA-NET_en.html)

<https://www.era-learn.eu/manuals-tools/p2p-in-h2020>

[https://ec.europa.eu/research/era/pdf/cofund-2014-infoday/3\\_ERA-NET\\_cofund.pdf](https://ec.europa.eu/research/era/pdf/cofund-2014-infoday/3_ERA-NET_cofund.pdf)

<http://www.kowi.de/en/kowi/collaborative-research/partnerships/era-nets/era-nets-european-research-area-networks.aspx>

### 1.1 ERA-NET NEURON II

**Website:** [www.neuron-eranet.org/](http://www.neuron-eranet.org/)

**End date:** 31/12/2020

**Canadian funding agencies:** CIHR, Fonds de recherche du Québec – Santé [FRQS]

**Overview:** Research into the human brain and its diseases is one of the key challenges of the 21<sup>st</sup> century. Among the many diseases affecting health, disorders of the brain are major causes for impaired quality of life and increasing health care costs. A concerted effort of funding organizations and of research groups in this area is needed to reach the long term goal of curing patients with disorders of the brain and nervous system, and helping their relatives. The extension of the collaboration beyond the European Research Area into North America reflects the global dimension of brain research, and increases NEURON's effectiveness. The ERA-NET serves as a platform for funding agencies and ministries to develop joint activities and programmes to coordinate high quality research across national borders.

The current NEURON II project builds on the achievements of its predecessors which were funded by the EC from 2003 to 2004 and from 2007 to 2011.

**Participating countries:** 16 European countries as well as Israel and Canada participate in NEURON II.

**Calls for proposals:** On an annual basis, the ministries and funding agencies networking within NEURON launch joint transnational calls in the field of disease-related neuroscience. NEURON calls are normally launched in January of each year and address important topics from the areas of neuroscience, neurology or psychiatry. Call topics are usually kept quite broad to cover various aspects of a research field and to allow for participation of different disciplines in the projects. Small research consortia consisting of three to five research groups are funded and projects may be funded for a maximum of three years.



## 1.2 E-RARE 3

**Website:** [www.erare.eu](http://www.erare.eu)

**End date:** 2019

**Canadian funding agencies:** CIHR, Fonds de recherche du Québec – Santé [FRQS], Genome Canada

**Overview:** The successful linking of research funding organizations in E-Rare-1 and subsequent joint funding activities have confirmed the need for the transnational funding of collaborative, multidisciplinary and ambitious projects on rare diseases. The current E-Rare-3 project will extend and strengthen the transnational cooperation on rare disease research to 2019 and build on the experience and results of the previous ERA-NET programmes E-Rare-1 and E-Rare-2.

**Participating countries:** The consortium is composed of 25 institutions from 17 European, Associated and non-European countries.

**Calls for proposals:** To date, E-RARE has held eight joint calls for proposals to fund multilateral research projects on rare diseases. The last call for proposals closed March 3, 2016.

Only transnational projects are funded. Each consortium submitting a proposal must involve a minimum of three eligible and a maximum of six eligible partners from at least three different countries participating in the call. No more than two eligible partners from the same country participating in the call will be accepted in one consortium. Additional partners that secure their own funding may join consortia. However, their number is limited to two.

## 1.3 GENDER-NET

**Website:** [www.gender-net.eu](http://www.gender-net.eu)

**End date:** 14/10/2016

**Canadian funding agencies:** CIHR, NSERC [observer]

**Overview:** GENDER-NET is a pilot transnational research policy initiative designed to address the common challenges still facing European research institutions in achieving gender equality in research and innovation. These challenges concern the persistent barriers and constraints to the recruitment, advancement and mobility of women in the European scientific system, the lack of women in decision-making, and the limited integration of the gender dimension in research programmes and content. By providing a strategic networking and cooperation framework for national/regional actors developing and implementing public research programmes and policies, the GENDER-NET ERA-NET scheme aims at:





## CHAPTER 1

- + Engaging EU Member States and Associated Countries to modernize their institutions through structural change, by developing and implementing gender equality plans or equivalent initiatives, and consequently improving the recruitment and career paths of female scientists as well as the working conditions of both women and men;
- + Ensuring scientific excellence, stimulating new knowledge and leading to technological innovations, by improving the integration of sex and gender analysis into all phases of basic and applied research;
- + Supporting coherent monitoring and reporting of progress made with common indicators to assess achievements; and
- + Reducing fragmentation across the ERA by helping reach a critical mass of research organizations and universities across Europe.

**Participating countries:** 12 countries in Europe and North America participate in GENDER-NET.

**Calls for proposals:** This framework has not launched joint calls to date, but might fund interdisciplinary research projects in the future.



## CHAPTER 2 JOINT PROGRAMMING INITIATIVES (JPIs)

**Objectives and typical activities:** Joint Programming Initiatives aim to address common societal challenges like climate change, aging, energy, or antimicrobial resistance – challenges that cannot be solved by one state alone. To date, 10 JPI themes have been identified and since 2009 the 10 JPIs have done substantial work in developing common visions, establishing governance structures and starting discussions on Strategic Research Agendas and joint activities.

**Participants:** Ministries or regional authorities and/or program owners such as research councils or other public funding organizations/agencies.

**End-users:** Participating countries, ministries, public funding agencies, and all types of research entities (industry, academia, etc.).

**Implementation:** The EC, the EU Member States and Associated Countries identify the common societal challenges and JPI themes. Once developed, the JPIs are implemented by funding agencies in the EU and by agencies in other participating countries like Canada. Participating countries develop a Strategic Research Agenda (SRA) to align their research based on common medium to long term research priorities and objectives. Then common activities can be implemented such as joint calls, knowledge hubs and task forces.

**Funding:** Management costs are carried by each of the agencies involved in the JPI. As part of a JPI, each national funding agency can contribute funds to calls for proposals when they are interested in supporting topic-specific research in their respective country. The EC can support the JPI process by financing support actions, launching complementary measures to actions undertaken by participating countries, and linking the JPIs to international actions and bodies. For example, ERA-NET Cofunds can be added to JPIs to fund transnational calls.

**Timeframes:** JPIs do not have end dates; they are long-term collaborative frameworks between participating countries.

**Joint calls for project proposals:** Conditions for participation vary depending on the JPI and the specific call. Each project submission must normally involve a minimum of three partners from three different JPI countries. Researchers can only apply to a JPI call for proposals when their country has contributed funding to that call. Applicants are subject to their national funding agency's eligibility criteria and if successful are funded by their national agency. Updated participation information and launch dates can be found on each JPI's website.



## CHAPTER 2

**Canadian participation:** Five of the 10 JPIs currently allow Canadian participation:

- + Neurodegenerative Disease Research [JPND]
- + A Healthy Diet for a Healthy Life [HDHL]
- + Antimicrobial Resistance [JPIAMR]
- + More Years, Better Lives- The Potential and Challenges of Demographic Changes [JPI MYBL]
- + Agriculture, Food Security and Climate Change [FACCE JPI]

The following Joint Programming Initiatives benefit from ERA-NET Co-funding [explained in Chapter 1]: JPND, JPIAMR, and FACCE JPI.

A full list of current JPIs is available here: [http://ec.europa.eu/research/era/joint-programming-initiatives\\_en.htm](http://ec.europa.eu/research/era/joint-programming-initiatives_en.htm)

*Sources:*

[http://ec.europa.eu/research/era/joint-programming-initiatives\\_en.htm](http://ec.europa.eu/research/era/joint-programming-initiatives_en.htm)

[http://ec.europa.eu/research/era/how-does-it-work\\_en.htm](http://ec.europa.eu/research/era/how-does-it-work_en.htm)

<https://www.era-learn.eu/manuals-tools/smart-coordination/positioning-of-the-era-net-scheme/joint-programming>

<https://www.era-learn.eu/manuals-tools/smart-coordination/positioning-of-the-era-net-scheme/joint-programming/relation-to-ERA-NET>

<https://era.gv.at/directory/62>

### 2.1 Neurodegenerative Disease Research [JPND]

**Website:** [www.neurodegenerationresearch.eu/](http://www.neurodegenerationresearch.eu/)

**Canadian funding agency:** CIHR

**Overview:** The EU Joint Programme – Neurodegenerative Disease Research [JPND] is the largest global research initiative aimed at tackling the challenge of neurodegenerative diseases. JPND seeks to increase coordinated investment between participating countries in research targeted at finding causes, developing cures, and identifying appropriate ways to care for those with neurodegenerative diseases.

The ultimate goal of JPND is to find cures for neurodegenerative diseases and to enable early diagnosis for early targeted treatments. JPND has identified through its Research Strategy common research goals that would benefit from joint action between countries in order to accelerate progress on solutions that can alleviate the symptoms, and lessen the social and economic impact for patients, families and health care systems.

**Participating countries:** JPND has 27 member countries and one observer. Canada is a full member.



## CHAPTER 2

**Calls for proposals:** JPND research generally focuses on five key areas: the origins of neurodegenerative disease, disease mechanisms and models, disease definitions and diagnosis, developing therapies, preventive strategies and interventions, and healthcare and social care.

Calls for proposals are generally launched annually in the spring. The JPND website features a partnering tool where researchers responding to JPND calls can showcase their expertise, find suitable collaborators, and pitch proposal ideas.

CIHR has participated in three calls to date and is working in collaboration with participating countries to develop an upcoming call.

**ERA-NET funding (JPcofuND):** JPND is supported by the EC through an ERA-NET cofund (JPcofuND). JPcofuND is a five-year initiative (2014-2019) to establish synergies between the JPND and Horizon 2020. As per ERA-NET provisions, JPcofuND will implement a call for proposals with top-up funding from the EC and the Commission will support other general activities under JPND.

### 2.2 A Healthy Diet for a Healthy Life (HDHL)

**Website:** [www.healthydietforhealthylife.eu/](http://www.healthydietforhealthylife.eu/)

**Canadian funding agency:** CIHR

**Overview:** Trans-disciplinary expertise, knowledge, facilities and approaches are needed to investigate the relationship between diet, exercise and health. In this context, the Joint Programming Initiative A Healthy Diet for a Healthy Life (HDHL) has high potential to deliver results that significantly improve the public health and quality of life of consumers with the long term goal of increasing innovation and competitiveness in participating countries. In addition, there is a need to examine the influence of genotypes, individual genetic and epigenetic differences, dietary patterns and lifestyles, including their interactions and changes over the time, on health and disease susceptibility and morbidity. JPI HDHL will contribute significantly to the construction of a fully operational European Research Area on the prevention of diet-related diseases and strengthen leadership and competitiveness of the food industry by effectively integrating research in the food-, nutritional-, social- and health sciences to increase knowledge and deliver innovative, novel and improved concepts.

**Participating countries:** 19 countries are full members of the JPI, including Canada, and six countries are observers.

**Calls for proposals:** CIHR has participated in two joint calls to date and is working in collaboration with participating countries to develop an upcoming call.

**ERA-NET funding:** JPI HDHL receives funding from the EC for joint calls for proposals under the ERA-NET framework.



## 2.3 Antimicrobial Resistance (JPIAMR)

**Website:** [www.jpiamr.eu/](http://www.jpiamr.eu/)

**Canadian funding agency:** CIHR

**Overview:** Antimicrobial resistance caused by the misuse of antibiotics is a societal problem that could spiral out of control if no action is taken. The Joint Programming Initiative on Antimicrobial Resistance (JPIAMR) aims to tackle this through joint collaborative actions, maximising research efforts and exchanging best practices. JPIAMR aims to align resources by creating a collaborative platform, maximising existing and future efforts to combat AMR. Through JPIAMR's collaborative platform, achievements could include new preventative and therapeutic approaches, integration of research findings in health services and care infrastructure and the development of globally coherent national and international strategies.

**Participating countries:** 21 countries are members of JPIAMR. Canada is a full member.

**Calls for proposals:** In April 2016, JPIAMR launched a rapid-action call for leading scientists in the field to establish international research networks that will develop guidelines and/or best practice frameworks. Up to €50,000 for each working group will be granted to cover the costs of meetings and travel required to deliver objectives. Networks are expected to provide outputs within a short timeframe [six to 12 months]. The call closes in June 2016. For more information, consult: 4th Joint Call: Research Networks

## 2.4 More Years, Better Lives - The Potential and Challenges of Demographic Changes (JPI MYBL)

**Website:** [www.jp-demographic.eu/](http://www.jp-demographic.eu/)

**Canadian funding agencies:** CIHR and SSHRC

**Overview:** The Joint Programming Initiative More Years, Better Lives – The Potential and Challenges of Demographic Change (JPI MYBL) seeks to enhance coordination and collaboration between European and national research programmes related to demographic change. Areas affected by demographic change cover a wide range of research fields and policy topics ranging from health to social welfare, education and learning, work and productivity, housing, urban and rural development and mobility. JPI MYBL therefore follows a transnational, multi-disciplinary approach bringing together different research programmes and researchers from various disciplines in order to provide solutions for the upcoming challenges.

**Participating countries:** 14 European countries and Canada currently participate in JPI MYBL as full members.



## CHAPTER 2

**Calls for proposals:** The first call for proposals closed in July 2015. The four research topics for this call were: modern work factors, longer working life and inequality, health challenges and caring responsibilities. CIHR committed \$750,000 to fund three projects under this call. A 2016 call for research proposals on 'Welfare, Wellbeing and Demographic Change: Understanding Welfare Models' closed in April 2016. CIHR and SSHRC have tentatively committed \$1.5M to this call.

### 2.5 Agriculture, Food Security and Climate Change [FACCE-JPI]

**Website:** [www.faccejpi.com/](http://www.faccejpi.com/)

**Canadian funding provided by:** Agriculture and Agri-Food Canada

**Overview:** The Joint Programming Initiative on Agriculture, Food Security and Climate Change [FACCE-JPI] brings together 21 countries that are committed to building an integrated European Research Area addressing the interconnected challenges of sustainable agriculture, food security and impacts of climate change. FACCE-JPI provides and steers research to support sustainable agricultural production and economic growth, to contribute to a European bio-based economy, while maintaining and restoring ecosystem services under current and future climate change. It aims to do so with a strong multidisciplinary research base, encompassing economic, social and scientific aspects, and a creative approach towards the alignment of national programmes and the input of multiple actors and stakeholders.

The five main research themes are: sustainable food security under climate change, environmentally sustainable growth and intensification of agricultural systems, evaluating and reducing trade-offs between food production, biodiversity and ecosystem services, adaptation to climate change throughout the whole food chain, and greenhouse gas mitigation.

**Participating countries:** 21 countries participate in FACCE-JPI. Canada is an Associated Country, without full membership.

**Calls for proposals:** FACCE-JPI has launched multiple calls for proposals in the past, some open to Canadian researchers and innovators through funding provided by Agriculture and Agri-Food Canada. Projects are normally funded for two to four years and must always involve at least three partners, including one from a FACCE-JPI country.

To learn more see: <http://www.agr.gc.ca/eng/science-and-innovation/international-engagement/how-international-collaboration-contributes-to-reducing-greenhouse-gas-emissions-in-agriculture/>



## CHAPTER 3 ARTICLE 185 INITIATIVES

**Objectives and typical activities:** Implementing Article 185 implies that participating EU Member States and other partner countries integrate [rather than simply coordinate] their research efforts by defining and committing themselves to a joint research program in which the EC promotes the voluntary integration of scientific, managerial and financial structures in the execution of those programs. The actions supported may cover subjects not directly linked to the themes of Horizon 2020, as long as they bring sufficient EU added-value. Participating countries and the EC develop joint calls for a broad variety of grants [e.g. mobility grants, fellowships, networks of excellence, ethics and regulatory projects, etc.].

**Participants:** Ministries or regional authorities and/or program owners such as research councils or funding agencies.

**End-users:** All types of research entities [industry, academia, etc.]

**Implementation:** Article 185 initiatives are proposed by the EC. They require the establishment of a Dedicated Implementation Structure [DIS] among participating state agencies and the DIS is responsible for the implementation of the joint research program[s].

**Funding:** The EU provides financial support to the DIS for the implementation of the national research program[s] involved in Article 185 initiatives. The participating countries also contribute.

**Timeframes:** From 2014 to 2020 under Horizon 2020 [prior phases existed under previous frameworks].

**Joint calls for project proposals:** Project proposals must normally include at least three eligible organizations from three different participating countries.

**Canadian participation:** Of the four existing Art. 185 Initiatives, Canada participates in one, the Active and Assisted Living programme.

*Sources:*

<https://www.era-learn.eu/manuals-tools/smart-coordination/positioning-of-the-era-net-scheme/article-185-initiatives>

[http://ec.europa.eu/research/era/art-185\\_en.htm](http://ec.europa.eu/research/era/art-185_en.htm)



### 3.1 Active and Assisted Living (AAL)

**Website:** [www.aal-europe.eu/](http://www.aal-europe.eu/)

**End date:** 2020

**Canadian funding agency:** CIHR

**Overview:** The Active and Assisted Living (AAL) program [formerly named Ambient Assisted Living] has funded projects in the field of information and communication technology (ICT) for active and healthy aging since 2008. The programme was renamed in 2014 after being renewed for a second phase and it is co-financed by 19 countries and the European Commission – under the Horizon 2020 umbrella – for an estimated budget of € 700 million until 2020.

The overall objective of AAL is to enhance the quality of life of older adults while strengthening the industrial base in Europe through the use of ICT. The AAL projects aim to introduce their solution to the market within two to three years after the end of the project. For this reason, as part of their funded work, the projects perform pilot tests in realistic settings and develop their business model together with the most relevant players of the value network. Under the first phase of AAL, some projects have already made their way to market.

**Participating countries:** 19 countries including Canada.

**Calls for proposals:** Every year, AAL launches a call for proposals in a given theme in the field of ICT for active and healthy aging. The topics covered by the programme include management of chronic conditions, social inclusion, access to the self-serve society, mobility of older adults, management of daily activities, support from informal carers [e.g. family and friends] and independent living.

The AAL call challenge for 2016 is: “Living well with dementia. The contribution of ICT to integrated solutions for enabling the wellbeing of people living with dementia and their communities.” The website is as follows: [www.aal-europe.eu/get-involved/call-2016/](http://www.aal-europe.eu/get-involved/call-2016/). The AAL 2016 call was launched in February 2016 and the deadline is May 26, 2016.





## CHAPTER 4 EUREKA

**Website:** [www.nrc-cnrc.gc.ca/eng/about/global/eureka.html](http://www.nrc-cnrc.gc.ca/eng/about/global/eureka.html)

**Canadian funding agencies:** Public and private funding mechanisms, including the National Research Council's (NRC's) Industrial Research Assistance Program (IRAP)

**Objectives and typical activities:** EUREKA aims to bring together industry, research institutions and financial resources to develop new technologies for innovative products, processes and/or services. Industry generally decides what types of projects will be developed. There are three types of activities:

- + EUREKA network projects: are transnational, market-driven innovative research and development projects. Network projects must consist of at least two participants from two member countries or alternatively, from at least one member country and one Associated Country [Canada is an Associated Country].
- + EUREKA clusters: Initiated by European industry, EUREKA clusters are long-term and strategically significant initiatives that develop technologies of key importance for European competitiveness. Addressing the needs of both large companies and SMEs, they are the engine for industrial innovation and economic growth.
- + Eurostars are dedicated to the R&D performing SMEs, and co-funded by the European Communities and 36 EUREKA member countries. Eurostars aims to stimulate these SMEs to lead international collaborative research and innovation projects by easing access to support and funding. It is fine-tuned to focus on the needs of SMEs, and specifically targets the development of new products, processes and services and the access to transnational and international markets. A Eurostars project must have a civilian purpose and be aimed at the development of a new product, process or service. The project must be completed in 36 months or less. Market introduction of the project results should be within 24 months of the completion of the project.

**Participating countries:** 41 members [40 European countries and the EC] as well as three Associated Countries [Canada, South Korea and South Africa].

**End-users:** Enterprises, especially SMEs that perform close-to-market R&D.

**Implementation:** EUREKA is an intergovernmental initiative with a Secretariat in Brussels and a Chair which rotates every year among member countries. It also has a High-Level Group (HLG) which is composed of representatives from the national ministries responsible for EUREKA. The HLG endorses new EUREKA projects and makes policy and management decisions. National Project Coordinators (NCPs) run the national EUREKA offices and are the direct contacts for project participants, helping them to set up and run projects. NRC houses and manages Canada's EUREKA National Office and provides companies with a first contact point in Canada for [EUREKA's global network](#). NRC and its partners can connect to national programs and can also connect Canadian organizations with potential partners and opportunities.



## CHAPTER 4

**Funding:** EUREKA's Secretariat in Brussels is jointly financed by all members. Project partners apply to national or European funding programs or finance their project work with their own funds.

**Project proposals:** Industry decides what types of projects [bottom-up approach] will be developed and the HLG endorses new projects. Project partners apply to national or European funding programs or finance their project work with their own funds. Since 1985, EUREKA has facilitated 6,100 projects with over 37 billion euros in public and private funding. With an average of three countries per project, EUREKA projects have engaged over 10,200 SMEs, 5,000 large companies, 2,200 research centres and 2,600 universities.

**Canadian participation:** Canadians can participate in any of the following:

### **EUREKA clusters:**

- + [EURIPIDES<sup>2</sup>](#) for electronic packaging and smart systems
- + [ITEA3](#) for software-intensive systems
- + [CELTIC PLUS](#) for telecommunications
- + [EUROGIA2020](#) for low-carbon energy technologies
- + [METALLURGY EUROPE](#) for industrial metallurgy and advanced manufacturing
- + [ACQUEAU](#) for environmental and water related technologies
- + PENTA for Micro- and Nano-Electronic Components and Systems

### **Eurostars** [Art. 185]

**Calls for proposals:** Canada's National EUREKA Office launches collaborative calls for proposals under EUREKA as a means to stimulating joint project proposals between Canada and the other participating countries in technology areas of mutual interest. Many calls are open-ended, while others have closing dates. Canadian researchers and innovators can also submit project applications at any time, in any civilian application area, with any of the forty-one [EUREKA Member States](#). Further information on calls for proposals is available on NRC's website at: <http://www.nrc-cnrc.gc.ca/eng/about/global/proposals.html>

*Sources:*

<https://www.era-learn.eu/manuals-tools/smart-coordination/positioning-of-the-era-net-scheme/eureka>

<http://www.eurekanetwork.org/>

<https://www.eurostars-eureka.eu/about-eurostars>

<https://www.eurekanetwork.ca>



## CHAPTER 5 THE TRANS-ATLANTIC PLATFORM (T-AP)

**Website:** [www.transatlanticplatform.com](http://www.transatlanticplatform.com)

**Canadian funding agencies:** SSHRC, Fonds de recherche du Québec – Société et culture (FRQSC)

**Overview:** Formed in October 2013 through a grant from the EC's FP7 programme, the Trans-Atlantic Platform for the Social Sciences and Humanities (T-AP) is a collaboration between key humanities and social science funders in 12 countries in South America, North America and Europe. The Platform aims to enhance the ability of humanities and social science funders, research organizations and researchers to engage in transnational collaboration. T-AP is funded by the European Commission and co-led by the Netherlands Organization for Scientific Research and the Social Sciences and Humanities Research Council of Canada (SSHRC).

**Participating countries:** 12 countries in South America, North America and Europe.

**Calls for proposals:** T-AP has launched the 2016 T-AP Digging into Data Challenge to support research projects that use “big data” to address questions in the social sciences and humanities. Although this is the fourth Digging into Data challenge, it is the first time it has been sponsored by T-AP.

This funding opportunity is open to international projects that consist of teams from at least three member countries, and must include partners from both sides of the Atlantic. Projects must address any research question in humanities and/or social sciences disciplines by using large-scale, digital data analysis techniques, and show how these techniques can lead to new insights. Successful applicants will receive funding from their own national funding agencies for projects that can last for up to 36 months.

Applications will be accepted through the Digging into Data website. The online application system opened on April 15, 2016. The deadline for applications is June 29, 2016. Information on the call can be found here: <http://diggingintodata.org/about/application-materials>



## CHAPTER 6 THE BELMONT FORUM

**Website:** [www.belmontforum.org](http://www.belmontforum.org)

**Canadian funding agency:** NSERC

**Overview:** The Belmont Forum is a high-level group of the world's major and emerging funders of global environmental change research and international science councils. It aims to accelerate delivery of the international environmental research most urgently needed to remove critical barriers to sustainability by aligning and mobilizing international resources. The aims of the Belmont Forum are encapsulated as the Belmont Challenge: "To deliver knowledge needed for action to mitigate and adapt to detrimental environmental change and extreme hazardous events."

In order to meet its goals, the Belmont Forum coordinates funding for collaborative research actions. These high-priority research activities improve the way funding agencies collaborate with each other and develop opportunities for research. Participating countries: The Belmont Forum has 15 member countries and international organizations, two associate member countries, one partner (Canada), and three observer countries.

**Calls for proposals:** The Belmont Forum normally opens two calls for proposals per year on topics broadly related to global environmental change and member countries are free to participate or not in these calls. Canadians can participate in calls for proposals when funds are provided by Canadian granting agencies, otherwise Canadians can participate if they bring their own funding to a consortium.

Information on past and upcoming calls can be found here: [www.belmontforum.org/collaborative-research-actions](http://www.belmontforum.org/collaborative-research-actions)



## CHAPTER 7 OTHER CANADIAN FUNDING ALIGNMENT INITIATIVES

### 7.1 General Granting Council Funding

The Granting Councils (SSHRC, CIHR, NSERC) have certain programs that while not specifically targeting EU-Canada research, enable Canadian researchers to use their grants for this purpose. Consult their websites for information on their funding programs.

### 7.2 Coordinated Calls

A coordinated call consists of the EC and a ministry or funding agency from a non-EU country jointly launching a call under Horizon 2020. These one-off calls for proposals are the result of negotiations between the EC and the non-EU national/regional ministry or funding agency (unlike a JPI, for example, that consist of an SRA and several calls for joint research). Coordinated calls fund research projects in areas of mutual benefit, are jointly evaluated, and funded. Consortia consist of researchers and innovators from both the EU and the non-EU country.

To date, one coordinated call between the EC and Canada was launched in the field of aeronautics. The EC, Industry Canada and the Consortium for Aerospace Research and Innovation in Canada (CARIC) partnered to provide funding to EU-Canada research projects in specific areas of interest in aeronautics. This call was the result of the CANNAPE (Canadian Networking Aeronautics Program for Europe) initiative. Information on this past call is available here: <http://www.era-can.net/canada/canada-eu-coordinated-call-for-projects-is-officially-opened/>.

Further coordinated calls between the EC and Canada may be developed in the future to support international research collaboration in areas of mutual interest.

### 7.3 Provincial Funding

The government of Quebec has a program to support the development of international research and innovation projects between researchers from academia and industry. The annual call for project proposals opens in the fall and ends in November of each year. Eligible projects include those eligible under Horizon 2020, for a maximum assistance of \$ 1.5 million over three years. Projects must align with the strategic directions of the Quebec government in research and innovation. For more information consult: <http://www.economie.gouv.qc.ca/objectifs/informer/recherche-et-innovation/page/programmes-18980/> [in French only]. Other provinces may also contribute to such projects from time to time.

### 7.4 University Funding

Certain Canadian universities are funding their researchers' participation in Horizon 2020 and other Canada-EU collaborations.



## 7.5 Public-Private Partnerships (PPPs)

Public-Private Partnerships (PPPs) under the Horizon 2020 framework are forms of cooperation between public authorities and businesses. A number of PPPs are open to non-European funding agencies.

PPPs have been developed in several areas within the EU, such as in transport, public health, public safety, waste management and water distribution. In the case of PPPs in research activities, the objective is to promote the convergence of interest with industrial commitment and leadership in determining strategic research agendas. Furthermore, they seek to promote research and innovation in the manufacturing, construction and automotive sectors.

Industry and research institutions participating in PPPs provide input to the EC in the design of calls for proposals. Calls for proposals launched by PPPs follow regular Horizon 2020 rules and procedures. Canadian researchers and innovators can apply as 'third country' participants regardless of whether a Canadian funding organization has contributed funds to the PPP. These calls for proposals are posted on the [European Commission's Research and Innovation participant portal](#).

Two types of PPPs exist under Horizon 2020:

- + **Contractual PPPs:** The budget is only committed on an annual basis through Horizon 2020 calls in Work Packages. They are prepared on the basis of an industry-developed multi-annual roadmap and a contractual arrangement which specifies an indicative seven years EC funding. There are commitments by industry to match this but it is not legally binding.
- + **Institutional PPPs:** Joint Technology Initiatives (JTIs) are similar to contractual PPPs, but instead they have a fenced seven year budget. There is a Joint Undertaking which launches the calls and there are additional commitments of industry outside the calls, which are inserted in the legislation. The EC identifies JTIs as a means to support trans-national cooperation in key areas where research and technological development can contribute to European competitiveness and quality of life. JTIs are open to a wide range of industries across Europe, including small and medium sized enterprises, and research organizations. The following JTIs are open to participation from Third Country funding organizations. While there are currently no Canadian funding agencies participating in PPPs, Canadian researchers and innovators should monitor developments in this area.



<b>JTI</b>	<b>Objective</b>
<u>Innovative Medicines Initiative (IMI) 2</u>	To develop next generation vaccines, medicines and treatments, such as new antibiotics
<u>Fuel Cells and Hydrogen (FCH) 2</u>	To accelerate market introduction of clean and efficient technologies in energy and transport
<u>Clean Sky 2</u>	To develop cleaner, quieter aircraft with significantly less CO2 emissions
<u>Bio-Based Industries</u>	To use renewable natural resources and innovative technologies for greener everyday products
<u>Shift2Rail</u>	To develop better trains and railway infrastructure that will drastically reduce costs and improve capacity, reliability and punctuality
<u>Single European Sky Air Traffic Management Research (SESAR)</u>	To develop the new generation of European Air Traffic Management system that will enhance the performance of air transport

## ANNEX I: Countries Participating in Initiatives Outlined in this Guide

Canadian ministries and funding agencies are participating in the initiatives shown in the table below. The table also shows which other countries are participating in these multilateral opportunities. The information is subject to change, as additional countries join initiatives. Countries participating in the initiatives shown in the table may not always participate in all the calls for proposals launched under the initiative. Consult the specific call text to confirm country participation.

Countries	JPND	FACCE JPI	HDHL	JPI MYBL	JPIAMR	NEURON II	GENDER-NET	E-RARE 3	AAL	T-AP	Belmont
Albania	x										
Argentina				x						ass.	
Australia											x
Austria	x	x	x	x	x	obs.	x	x	x		obs.
Belgium	x	x	x	x	x	x	x	x	x		obs.
Brazil										x	x
Chile										x	
China											x
Croatia	x										
Cyprus		x	obs.			x			x		
Czech Republic	x	x	obs.		x						
Denmark	x	x	x	x	x				x		
Estonia		x	obs.		x						
Finland	x	x	x	x	x	x			x	x	
France	x	x	x	x	x	x	x	x	x	x	x
Germany	x	x	x	x	x	x	obs.	x	x	x / ass.	x
Greece	x				x			x	x		
Hungary	x							x	x		
Iceland						x					
India											x
Ireland	x	x	x			x			x		
Israel	x	x	obs.		x	x	x	x	x		
Italy	x	x	x	x	x	x	x	x	x		x
Japan					x						ass.







Countries	JPND	FACCE JPI	HDHL	JPI MYBL	JPIAMR	NEURON II	GENDER-NET	E-RARE 3	AAL	T-AP	Belmont
Latvia			obs.			ass.		X			
Luxembourg	X				X				X		
Mexico										X	
Netherlands	X	X	X	X	X			X	X	X	obs.
New Zealand			X								
Norway	X	X	X	X	X		X / obs.		X		X
Poland	X	X	X	X	X			X	X		
Portugal	X				X			X		X	
Romania	X	X	X		X			X	X		
Slovakia			X			ass.					
Slovenia	X		obs.				X		X		
South Africa											X
Spain	X	X	X	X	X		X		X		
Sweden	X	X	obs.	X	X			X	X		X
Switzerland	X	X	X	X	X		X		X		
Turkey	X	X	X	X	X			X			
UK	X	X	X	X	X		X		X	X	X
United States							X / obs.			ass.	ass.

obs.: observer countries

ass.: associate members or partners



## ANNEX II

## List of Acronyms

AAL	Active and Assisted Living Article 185 Initiative
CIHR	Canadian Institutes of Health Research
EC	European Commission
EU	European Union
FACCE-JPI	Joint Programming Initiative on Agriculture, Food Security and Climate Change
FRQS	Fonds de recherche du Québec – Santé
FRQSC	Fonds de recherche du Québec – Société et culture
HDHL	A Health Diet for a Healthy Life Joint Programming Initiative
JPI	Joint Programming Initiative
JPI MYBL	Joint Programming Initiative More Years, Better Lives – The Potential and Challenges of Demographic Change
JPIAMR	Joint Programming Initiative on Antimicrobial Resistance
JPND	Joint Programme – Neurodegenerative Disease Research
JTI	Joint Technology Initiative
NSERC	Natural Sciences and Engineering Research Council
P2Ps	Public to Public Partnerships
PPPs	Public-Private Partnerships
SRA	Strategic Research Agenda
SSHRC	Social Sciences and Humanities Research Council
T-AP	Trans-Atlantic Platform



## Methodology

All information collected for the purpose of this guide is publicly available.

### ERA-Can+ project

The *Guide for Canadians on Multilateral Cooperation with Europe* is a product of the ERA-Can+ project. Building on several years of successful collaboration, ERA-Can+ fosters and supports enhanced collaborations between Canadian and European researchers and innovators in the academic and private sectors.

The ERA-Can+ consortium is led by the Agenzia per la Promozione della Ricerca Europea (APRE) in Italy. The other European partners are the Zentrum für Soziale Innovation (ZSI) in Austria, the Centre National de Recherche Scientifique (CNRS) in France and der Projektträger im Deutschen Zentrum für Luft- und Raumfahrt (DLR) in Germany. The Canadian partners are Universities Canada; Global Affairs Canada and the Public Policy Forum (PPF).

Additional information about ERA-Can+ and project activities can be found at [www.era-can.net](http://www.era-can.net).

Other ERA-Can+ publications of interest:

- + [Guide to Canadian participation in the European Union's Framework Programme for Research and Innovation \(2014-2020\)](#)
- + [Guide for Europeans to Canadian Science, Technology & Innovation Programs](#)
- + [Canada-EU Science, Technology and Innovation Observatory Report](#)



## AIM OF THE GUIDE

This *Guide for Canadians on Multilateral Cooperation with Europe* describes opportunities open to Canadians through: ERA-NETs, Joint Programming Initiatives (JPIs), Article 185 Initiatives, EUREKA, the Trans-Atlantic Platform (T-AP), the Belmont Forum, and other funding alignment initiatives. Canadian funding organizations support Canadians' participation in these initiatives.



This guide is a product of the ERA-Can+ project, funded by the European Commission's 7th Framework Programme (Grant Agreement 609507). It has been prepared by Universities Canada based on information available as of April 2016. For the latest information on the ERA-Can+ project, please visit the ERA-Can+ website at [www.era-can.net](http://www.era-can.net).