



Canada-Italy Innovation Award 2020

Call for Proposal

Overview

The Embassy of Canada to Italy is pleased to accept applications for the *Canada-Italy Innovation Award 2020*. This award provides funding to Italian innovation experts, researchers, scientists, startupper, creative industry professionals, and innovative individuals to undertake a trip to Canada to develop collaborative projects.

Mission

The *Canada-Italy Innovation Award* aims to develop new and existing relationships between Canadian and Italian experts into long-term collaborations. Applications are open to Italian individuals connected with Canadian counterparts, to be identified by applicants. Ideal outcomes include joint publications and projects; student/researcher exchange programs; sharing of equipment, materials and facilities; exchange of skills and techniques; institutional linkages; applied technology development; creative products and applications; and technology transfer. The development of innovative models of collaboration is strongly encouraged. Initial outcomes should be delivered over the first 6 to 12 months following the visit and lead to the development of long-term relationships.

Scope and Priority Areas

The Embassy of Canada to Italy aims to support the development of strong, targeted relationships between leading individuals, researchers and institutions in Italy and their counterparts in Canada.

Projects considered for the award must address the priorities detailed below. These are aligned with Government of Canada policy priorities and with some of the future challenge areas identified by an extensive foresight exercise led by the Social Sciences and Humanities Research Council of Canada (SSHRC). Please ensure your project responds to at least one of these priorities.

1. Governance and Ethics in Cyberspace and in the use of Artificial Intelligence/AI

Description

New tools and products enabled by information technology, including artificial intelligence (AI), present enormous economic and social opportunities but also governance challenges and new ethical quandaries. As we explore the use of Cyberspace, data, and digital tools like Artificial Intelligence (AI), we have to ensure they are governed by clear values, ethics, and laws.

Summary

Realizing the full potential of Artificial Intelligence (AI) and other new technologies in order to benefit all citizens requires international collaboration and coordination; support and guidance is required in order to develop a responsible and ethical governance and use of Cyberspace, data, and digital tools such as Artificial Intelligence, that are grounded in human rights, inclusion, diversity, innovation, and economic growth.

Projects have to address one of the following objectives:

- ° To promote and protect a human-centric, gender balanced, and ethical approach to Cyberspace, and use of AI and digital tools, grounded in human rights;
- ° To propose models for international and public-private collaboration in the development and implementation of norms and/or rules for new technologies that promote innovation while also safeguarding human rights;
- ° To stimulate innovation, growth and well-being through AI/digital tools;
- ° To strengthen diversity and inclusion through AI and other digital tools;
- ° To foster transparency and openness of AI/digital tools systems;
- ° To propose mechanisms for limiting or preventing the development of autonomous weapons systems;
- ° To promote and protect democratic values, processes and institutions; and
- ° To bridge digital divides.

2. Building Better Lives Across the Gender Spectrum

Description

Shifting power structures and changing social norms challenge global gender inequality. Informed interventions could improve the quality of life in many countries. Innovations in human enhancement and biodesign could in future radically reframe gender issues.

Summary

Women, trans and non-binary people are making advances in economic and social spheres, and existing systems of power are responding. Some men are acting as champions of change, while others need to adapt or risk being left behind. Complacency and resistance to changing traditional patterns of privilege are barriers to lasting gender equality and equity. Further studying the enhancing, augmenting, or biodesigning of human physiology could expand the popular conception of the gender spectrum and the related cultural, social, political, and economic assumptions.

Projects have to address one of the following objectives:

- To recognize, prevent and eliminate disadvantage or discrimination;
- To create and maintain a culture that supports a diverse, inclusive and welcoming society;
- To reduce gender inequalities in access to and control over the resources and benefits of development.

3. Inhabiting Challenging Environments

Description

The launch of the first automobile into the asteroid belt leads us to consider how planning and inventing for people to live in challenging environments could change us physically, socially, culturally, and politically.

Summary

As space exploration advances, priorities may shift from government concerns to private sector concerns. New marine technologies and architectures are playing a role as people propose and pilot innovative schemes to inhabit oceans – on and below the surface. Several major biological, psychological, and cultural shifts in our species could emerge as we evolve, or redesign ourselves, to live in challenging environments – including the increasingly challenging environment of the Earth after climate change.

Projects have to address one of the following objectives:

- To develop solutions to important problems;

- To contribute to the global effort to combat climate change by providing data to measure changes over land, over sea, and in the atmosphere;
- To promote and build resilience through efforts that build capacity to reduce risks.
- To develop materials, propulsion, energy, and computing that support habitat design for extreme environments;
- To develop bioengineering innovations that could help humans in extreme environments.

4. Working in the Digital Economy

Description

Over the next two decades, new technologies will transform the economy, work, business and learning. All stakeholders are preparing for the transition, but the optimal or robust strategies are unclear.

Summary

Emerging technologies, such as artificial intelligence (AI), data analytics, sensors, blockchain, robotics, telepresence, 3D printing and synthetic biology, are creating a global digital infrastructure that will transform the economy and the nature of work. Over the next decade, many jobs, industries and communities are expected to face disruption. Firms may become more virtual. There may be fewer traditional jobs, and more virtual gig work. Some people may become “surplus” to requirements. The structural changes could have implications for macroeconomic theory and policy. The digital transition could have widespread positive and negative impacts.

Projects have to address one of the following objectives:

- To develop high-quality citizen services;
- To conceive of mechanisms to ensure mass prosperity in a fully digital economy;
- To mitigate and/or reduce job unbundling and precarious work;
- To mitigate potential social and psychological impacts;
- To promote the development of skills and learning options suited to the new world of work.

5. Living Within Earth’s Carrying Capacity

Description

Humankind is putting an unsustainable strain on the Earth’s capacity to support life. We are at, or near, the tipping point for several ecosystem services. Fundamental changes in our economic and political systems and our way of life may be needed over the next two or three generations if humans are to live within the carrying capacity of the planet.

Summary

Rising global temperature, growing ocean acidification, more frequent forest fires, expanding desertification, decreasing biodiversity, and more destructive weather are symptoms of a deeper problem. Human demands are exceeding the absorptive and productive capacity of global ecosystems. To survive and thrive, humankind must find a way to live within the carrying capacity of the planet. We face social, economic and political challenges in making the transition to sustainability; and potential consequences if we fail to live sustainably.

Projects have to address one of the following objectives:

- To rethink the economy-environment-society interface;
- To develop better understanding of the linkages across all ecosystem services in order to identifying potential interactions and tipping points;
- To develop a way to share carrying capacity before confronting a crisis;
- To explore ways to ensure sustainable energy transitions.

Funding scope

Awards are to support the applicant's travel to Canada. The value of an award will be up to a maximum of €3,000 (EUR). Expenses that are eligible for reimbursement include economy class airfare (not premium economy), accommodation, local transportation and a €60 (EUR) per diem. No other costs will be considered.

Eligibility and Funding Criteria

The *Canada-Italy Innovation Award* is available to innovation experts, researchers, scientists, startupper, creative industries professionals, and innovative individuals collaborating with Canadian partners. Private/public partnerships are encouraged.

Funding through the *Canada-Italy Innovation Award* is to support a short visit to Canada by the **Italian awardee only**.

Successful applicants will be required to complete a report immediately following the visit and must commit to providing brief updates on follow-up activities and outcomes 6 and 12 months after the visit.

Evaluation Criteria

Applications will be evaluated on the following criteria:

- Degree of innovation of the proposed project
- Quality of proposed outcomes and expected ability for their delivery
- Relevance to Canadian priorities described above

- Potential for significant, long-term collaboration
- Potential to broaden the collaboration to a wider, institutional level
- Use of creative / innovative collaboration models
- Innovative use of research infrastructures

Special consideration will be given to applications that demonstrate why the proposed research would particularly benefit from an international collaboration.

Applications will be reviewed by the Embassy of Canada to Italy in collaboration with relevant experts.

How to Apply

Applications should be prepared in English or French on the *Canada-Italy Innovation Award* **application form at the link** <https://forms.gle/vZMrWdpAFIcST8xV9> and submitted according to the instructions.

Disbursement of the *Canada-Italy Innovation Award*

Canada-Italy Innovation Award funds will be provided as reimbursement for incurred expenses. Receipts, invoices, and expense summaries, in original, as well as a letter by the Canadian partner, must be returned together with a **final report** before payment will be issued. Disbursement of funds is contingent upon return of all requested documentation.

Important Dates

April 1, 2020 (11:59 pm, Rome time)	Deadline for applications
May 15, 2020	Announcement of Award winner(s)
November 16, 2020	Deadline for completion of Award travel to Canada
Within 2 weeks of return	Final report and expenditure records due

All applicants will receive by email first an acknowledgment of receipt of their submission and later a notification of its status. Winners will be further notified and announced on the Embassy social media accounts. All other applicants will not be subject to additional communications regarding their submission.

Info: rome-pa@international.gc.ca