

AMBASSADE DE FRANCE AU JAPON

DEPARTMENT FOR SCIENCE AND TECHNOLOGY

Funding tools to support S&T collaboration between France and Japan

This document introduces a non-exhaustive inventory of funding options for France-Japan collaboration. It lists both funding for projects fulfilment and funding dedicated to mobility (short or long-term stays of students or young researchers). The first part is about programs dedicated to France-Japan partnership, while the three others parts list collaboration programs that are not only between France and Japan, but that can be used for it.

Certain programs may have slightly changed, this document is regularly updated.



1. BILATERAL FRANCE-JAPAN PROGRAMS

Those programs are dedicated to France-Japan partnerships.

1.1 ANR

1.1.1 ANR International call

ANR launched a bilateral joint call with the Japan Science and Technology Agency, as announced in the work plan of ANR for 2018. The eligible research fields were Generic Technologies (robotic, cobotic, teleoperation, localization, identification and cartography, image treatment, observation system, captors and materials).

Another bilateral joint call may be launched with the Japan Science and Technology Agency in the fields of energy, industrial stimulation and information and communication technologies.

http://www.agence-nationale-recherche.fr/suivi-bilan/historique-des-appels-a-projets/appeldetail1/appel-a-projets-generique-2018/

1.1.2 ANR JST Joint Call

ANR and JST have signed a new French-Japanese collaboration agreement in scientific research based on CREST program. It will be concretized by the launch of a joint call in the two following Priority Areas in the frame of the JST-CREST program:

- Quantum technology (www.jst.go.jp/kisoken/crest/en/research_area/ongoing/bunyah28-2.html)
- Symbiotic Interaction (www.jst.go.jp/kisoken/crest/en/research_area/ongoing/areah29-4.html)

The proposals should be led by a Japanese PI and a French PI and will be evaluated via a peer-review procedure by JST and ANR. The call is open to public and private partners. The call opening is planned in Mid February 2018 and the deadline for submission is mid-April 2018.

<u>http://www.agence-nationale-recherche.fr/en/information/news/single/pre-announcement-jstanr-joint-call-based-on-crest-program/</u>

http://www.jst.go.jp/kisoken/boshuu/teian.html (JP)

1.2 Hubert Curien Program (PHC) SAKURA

This program from the Ministry of Europe and Foreign Affairs and carrying out by Campus France, funds around 12 grants during 2 years in order to facilitate exchanges between partners of a same project. The Japanese partner (JSPS) funds the same number of grants. The Japanese scientific partner should be under 46 y.o and the overall projects should involve young researchers. The annual call for projects covers all fields of research, including Human and Social Science (contemporary subject being encouraged). Please note that the French team and the Japanese team have to submit the same project to their national institution: Campus France or JSPS.

http://www.campusfrance.org/fr/sakura

http://www.jsps.go.jp/j-bilat/semina/jrss.html

1.3 French government grants of mobility (BGF)

The French government grants program aims to support young Japanese students or researchers willing to do a part of their studies in France. Duration: 1 university year (10 to 12 months), renewable once.

http://www.ambafrance-jp.org/article2915



1.4 Exploration Japan

The programme "Exploration Japan" allows French scientists working in a French research institution to run an exploratory mission in Japan to discover the Japanese research landscape. The mission should involve meeting(s) with new Japanese fellows to start new initiatives that could lead to a scientific joint project.

https://www.diplomatie.gouv.fr/fr/politique-etrangere-de-la-france/diplomatie-scientifique/veillescientifique-et-technologique/japon/article/lancement-de-l-edition-2018-du-programmeexploration-japon-ouvert-a-tous-les

1.5 Exploration France

The programme "Exploration France" allows researchers working in a Japanese research institution to run an exploratory mission in France to discover the French research landscape. The mission should involve meeting(s) and visit(s) with new French fellows to start new initiatives that could lead to a scientific joint project.

https://jp.ambafrance.org/Lancement-de-la-premiere-edition-du-programme-Exploration-France-12543

1.6 CNRS-JSPS calls

CNRS (*French National Centre for Scientific Research*) coordinates with JSPS (*Japan Society for the Promotion of Science*) four types of calls:

1.6.1 JSPS Bilateral program with CNRS

This program aims at forming sustainable networks evolved from individual scientist exchanges including young researchers.

https://www.jsps.go.jp/english/e-bilat/call.html http://www.cnrs.fr/derci/spip.php?article50

1.6.2 JSPS Summer Program

This program offered to young pre- and postdoctoral researchers from France for a 2-months period in the summer (June – August). Fields of research must be humanities, social sciences and natural sciences.

http://www.jsps.go.jp/english/e-summer/index.html

1.7 INSERM-JSPS calls

This annual call supports exploratory visits from researchers as well as bilateral seminars. <u>https://www.jsps.go.jp/english/e-bilat/call.html</u>

https://www.inserm.fr/professionnels-recherche/appels-projets-et-

financements/financements-pour-collaboration-internationale-et-europeenne/programmesfinancement-avec-japon

1.8 Ayame Program Inria-JSPS

This program aims to reinforce the collaborations between the projects teams from Inria and high level research teams from all around the world. The Japanese teams receive support from the JSPS. https://www.jsps.go.jp/english/e-bilat/call.html

http://www.inria.fr/en/research/international-mobility/associate-teams/call-for-projects



1.8 Japanese foundation

The Japanese Foundation is represented in France by the Maison de la Culture du Japon à Paris or MCJP (The Japan Cultural Institute in Paris).

The Japan Foundation conducts programs in the three major areas of Arts and Cultural Exchange, Japanese-Language Education Overseas, Japanese Studies and Intellectual Exchange, as well as Strengthening Cultural Exchange in Asia. There are applicable programs in each of these areas, and support is provided for activities conducted by individuals and organizations that are involved in international exchange.

https://www.mcjp.fr/fr/la-mcjp/la-fondation-du-japon/programmes-de-subventions-de-lafondation-du-japon-annee-fiscale-2014-2015 https://www.jpf.go.jp/e/program/

2. NATIONAL PROGRAMS FOSTERING INTERNATIONAL COOPERATION

These programs may be used for French-Japanese cooperation.

2.1 French programs

2.1.1 ANR program: welcome of high level researchers

This call for projects is open to all scientific fields and applies to two types of researchers: leading scientists whose careers are world-wide recognized, and high potential researchers who can prove a very high academic level at an international scale.

This program replaces the former "Retour post-doctorant et Chaires d'excellence" program. The applications to this call for projects are expected to be a collaborative work between the researcher and the hosting institution. The indicative bracket for this ANR funding is 150-900 k \in .

http://www.agence-nationale-recherche.fr/informations/actualites/detail/accueil-de-

chercheurs-de-haut-niveau-un-dispositif-gagnant-gagnant/

http://www.diplomatie.gouv.fr/fr/enjeux-internationaux/echanges-scientifiques-

recherche/partenariats-scientifiques-20601/partenariats-scientifiques-20152/article/technologiesde-l-information-et

2.1.2 CNRS Momentum

CNRS launches a call for proposals that aims at enabling independent and talented young scientists to create and lead an original project within a CNRS affiliated laboratory. The CNRS-Momentum funding is allocated for a period of 3 years. CNRS has identified 13 different eligible thematic for this call. You can check the list on its website:

http://www.cnrs.fr/mi/spip.php?article1401

2.1.3 Eiffel scholarships

The Eiffel Excellence Scholarship Programme was established by the French Ministry of Europe and Foreign Affairs to enable French higher education establishments to attract top foreign students to enrol in their master's and PhD courses. Only the French higher education institutions may submit candidature files.

https://www.campusfrance.org/en/eiffel

2.1.4 Program from the Mathematical Sciences Foundation in Paris

The Foundation Sciences Mathématiques de Paris offers a financial support for external scientists (junior/senior professors) to be invited in its affiliated laboratories for a **two-to-three month stay**.



Appointed scientists will also have the opportunity to visit and to work with members of external laboratories. Demands of less than two months or more than three months will not be considered for this program.

https://www.sciencesmaths-paris.fr/en/invitations-of-external-scientists-246.htm

It can also finances scientific research visits for at least one months in external laboratories (French or from abroad). It is aimed at PhD students who are members of a laboratory affiliated to the foundation.

https://www.sciencesmaths-paris.fr/en/the-foundations-research-chair-244.htm

2.1.5 N+i network

This network gathers several French Engineering schools and allows French students at Bachelor's level to follow an engineering curriculum abroad and allows foreign students to follow this type of curriculum in France.

http://www.nplusi.com/

2.1.6 Post-doctoral grants in the field of Biology and Information Technology / Grenoble, Saclay

The direction of technological research and life science of CEA offer 15 post-doctoral grants (two years) in the field of personalized medicine, bio-production, precision agriculture and advanced functional materials.

- Genetics and Personalized Medicine project leaders: renaud.sirdey@cea.fr and <u>francois.artiguenave@cea.fr</u>
- Functional Imaging of Plants- project leaders: herve.fanet@cea.fr and <u>bernard.genty@cea.fr</u>
- 3D cell culture Imaging project leaders: cedric.allier@cea.fr and <u>xavier.gidrol@cea.fr</u>
- Engineered Protein based Materials- project leaders: <u>xavier.baillin@cea.fr</u> and <u>francois.parcy@cea.fr</u> and <u>laurent.blanchoin@cea.fr</u>
- Bioproduction of chemicals- project leaders: <u>frederic.ducros@cea.fr</u> and <u>jean-paul.morlier@cea.fr</u>

These grants are intended for researchers holding a PhD in computer science, biology, physics, chemistry or Engineering sciences.

2.1.7 Cifre grants

The grant program Cifre, driven by the Ministry in charge of research through ANRT, contributes to the funding of PhD in enterprises up to 14 000€/year for 3 years. The company can also benefit from the "Credit impôt-recherche". The laureate will fully work on his research project in the company and in an academic laboratory. All nationalities are eligible. The PhD students have to be accepted in an "Ecole doctorale" to submit a Cifre project.

http://www.anrt.asso.fr/fr/decouvrir-la-procedure-cifre-7844

2.2 Japanese programs

2.2.1 MEXT Monbukagakusho program

This program is intended for students, but also for foreign PhD students. A one-year grant of 145,000 yen is delivered for a one-year-and-a-half period, in addition to 6 months of language classes. The candidates' applications must be transmitted to MEXT either by the Embassy from their country of origin or by the hosting university.

http://www.u-tokyo.ac.jp/en/prospective-students/mext_scholarship.html



http://www.jasso.go.jp/study_j/documents/scholarshipse_mext.pdf?bcsi_scan_96404f7f6439614d= 0&bcsi_scan_filename=scholarshipse_mext.pdf

The MEXT also coordinates priority international programs with PhD grants, on identified topics in several Japanese universities.

http://www.mext.go.jp/a_menu/koutou/ryugaku/kokuhi/tokubetu/07032702.htm

2.2.2 JSPS

Except for the calls coordinated with French organisms, French researchers can apply to the following international JSPS programs:

> JSPS summer program

This program offered to young pre- and postdoctoral researchers from France for a 2-months period in the summer (June – August). Fields of research must be humanities, social sciences and natural sciences.

http://www.jsps.go.jp/english/e-summer/index.html

> JSPS Postdoctoral Fellowship Program (Short-term)

This program provides opportunities for young pre- and postdoctoral researchers (up to 6 years after the thesis completion) from the US, Canada and Europe to conduct cooperative research in Japan, from 1 to 12 months. Fields of humanities and social sciences and natural sciences.

http://www.jsps.go.jp/j-fellow/j-fellow_14/20_eu_boshu.html http://www.jsps.go.jp/english/e-fellow/postdoctoral_short.html

> JSPS Postdoctoral Fellowship Program for foreign Researchers

Standard program: This program funds 12 to 24 months stays in Japan for young postdoctoral researchers (up to 6 years after the thesis completion) from overseas.

Short-term program: This program funds 1 to 12 months stays in Japan for pre and post-doctoral researchers from the US, Canada and Europe.

https://www.jsps.go.jp/english/e-fellow/application-18.html

> JSPS Invitation Fellowships for Research in Japan (short-term and long-term stays):

This program is designed to enable experienced researchers (who have a position equivalent to university professor, associate professor or assistant professor; or researchers who have completed their thesis more than 6 years ago) from overseas to go to Japan to work with their Japanese colleagues. Two Invitations Fellowships are offered: the short-term program (14 to 60 days) and the Long-term program (2 to 10 months).

http://www.jsps.go.jp/j-inv/index.html

http://www.jsps.go.jp/english/e-inv/index.html

> JSPS Invitation Fellowships for Research in Japan (distinguished researchers)

This program aims to invite overseas researchers with distinguished records of research achievements (Nobel laureates or equivalent) to Japan from 7 to 30 days for purpose corresponding to those records.

http://www.jsps.go.jp/english/e-inv/index.html



> JSPS Next Generation World-Leading Researchers Program

This program aims at supporting internationally renowned researchers in the field of green innovation and life science innovation. It is open to non-Japanese researchers who want to work in a Japanese institution.

http://www.jsps.go.jp/english/e-jisedai/index.html

> JSPS Core-to-Core Program: advanced research networks

This program is designed to create world-class research hubs in research fields considered to be cutting-edge and establish sustainable collaborative relations. All fields of humanities, social sciences and natural sciences.

http://www.jsps.go.jp/english/e-c2c/index.html

2.2.3 RIKEN

There are several programs to promote research projects at RIKEN:

- "International Program Associate" for PhD students: <u>http://www.riken.jp/en/careers/programs/ipa/</u>
- "Special Postdoctoral Researcher Program" for postdoctoral researchers: <u>http://www.riken.jp/en/careers/programs/fpr/</u>

2.2.4 NIMS (National Institute for Material Sciences)

Aiming to accelerate materials research for the solution of environmental and energy issues, GREEN invites researchers from universities and research institutes in Japan to work on self-defined research topics in the field of environment and energy using nanotechnology (topics well linked to GREEN's mission are particularly welcome) at NIMS, through a public recruiting process. http://www.nims.go.jp/GREEN/en/openlabo/index.html

2.2.5 HOSEI University

Invitations are extended to young scholars from abroad who are, at the least, enrolled in a doctoral degree program to apply to the HIF Fellowship Program to carry out non-degree research programs at Hosei University under the direction of and/or in cooperation with Hosei faculty and researchers. Research areas include those studies in the humanities, social or natural sciences, or engineering as deemed acceptable by Hosei.

http://www.global.hosei.ac.jp/en/researchers/hif/

2.2.6 Scholarships granted by local communities and international associations

More than 30 cities or prefectures or private foundations offer one year scholarships aimed at foreign students and PhD students.

http://www.jasso.go.jp/study_j/documents/scholarshipse_lg.pdf

2.2.7 The JREC-IN platform also features some opportunities of collaboration with Japan for foreign researchers: <u>https://jrecin.jst.go.jp/seek/SeekTop?ln=1</u>

2.2.8 MIRAI Program (Ministry for Foreign Affairs of Japan):

This program aims at welcoming graduate and undergraduate students from Europe, Central Asia and the Caucasus region to visit Japan for 10 days. The laureates will experience the culture of Japan,



attend academic lectures on politics, economics and sociology at Keio University and exchange their opinions with Japanese students. http://www.mofa.go.jp/press/release/press4e_001752.html

3. EUROPEAN PROGRAMS

3.1 Horizon 2020

The « Horizon 2020 » program includes several types of funding:

3.1.1 Collaborative projects

Japanese teams can participate but they may receive funding only if they apply together with one of their national agencies.

Two calls for projects opened with Japan on the following research areas:

- Advanced technologies (Security/Cloud/IoT/BigData) for a hyper connected society in the context of smart city
- ➢ 5G and Beyond

https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020euj-2018.html#c,topics=callIdentifier/t/H2020-EUJ-2018/1/1/1/defaultgroup&callStatus/t/Forthcoming/1/1/0/default-group&callStatus/t/Open/1/1/0/defaultgroup&callStatus/t/Closed/1/1/0/default-group&+identifier/desc

3.1.2 Individual scholarships

Individual scholarships concern researchers of all nationalities, provided they carry out the research linked to the scholarship in a European institution.

- The Marie Skłodowska-Curie actions back up the international mobility of European researchers, along with the mobility of international researchers in Europe, be it for students, PhD students or experienced researchers. <u>http://ec.europa.eu/programmes/horizon2020/en/h2020-section/marie-sklodowska-curie-actions</u>
- The ERC program (for "European Research Council") features four types of individual scholarships: Starting grants, for young researchers; "consolidator grants"; advanced grants, for senior researchers; and proof of concept, that targets only recipients of one of the three other scholarships, to help them carry out their project further. http://erc.europa.eu/

3.2 Erasmus Mundus

The Erasmus programs support the mobility of students, PhD students, postdoctoral researchers or experienced researchers.

http://www.japon.campusfrance.org/fr/erasmus-plus

3.2.1 The TEAM program - Technologies for information and communication Europe-East Asia Mobilities

This program gathers world-class universities in Europe (Pierre and Marie Curie University in France, Aalto University in Finland, Charles III University of Madrid in Spain, Technical University of Berlin in Germany, Eötvös Loránd in Hungary and the University of Trento in Italy), Japan (Tokyo University, Keio University, Nara Institute of Science and Technology) and South Korea (Chungnam National



University, Korean Advanced Institute of Science and Technology) in the field of information and communication technologies.

The goal is to create a community of excellence in technologies for information and communication. This program will make it possible to fund the mobility of a total of 110 people, including PhD students, postdoctoral researchers, and academic and administrative staff. 65% of the funding aims at Europeans wishing to work in Asia. This partnership intends to direct young talents to international formations that enable them to acquire new skills. It will also promote the share of good practice between partners and the creation of joint programs, both in research and formation.

www.team-mundus.eu

3.2.2 The EM EASED program – Euro-Asian Sustainable Energy Development

This program extends the previous EM-BEAM program that was active until 2014 and involved Japan and South Korea, to reinforce the collaborations between Europe and Asia regarding higher education, research, and their management, mainly in the field of energy. It involves 6 European partners (Centrale Paris in France, Free University of Brussels in Belgium, Technical University of Munchen in Germany, Polytechnic University of Milan in Italy, Polytechnic University of Madrid in Spain, Imperial College of London in the United Kingdom), 2 Japanese partners (Keio University and Okayama University) and 2 Korean partners (Korean Advanced Institute for Science and Technology and Pusan National University). It aims at strengthening the collaborations between the involved research teams and between administrative staffs too, so as to share about good practice, pedagogic activities, knowledge and academic acknowledgement.

https://eramundus.ecp.fr/em_eased/positions

3.3 The Canon Foundation – research Fellowships

The Canon foundation offers 15 fellowships (for amounts up to 27.500 euros) for young researchers (PhD students, postdoctoral researchers) or experienced researchers who wish to stay for 3 months up to 1 year:

- > in Japan for European applicants affiliated to research institutions in Europe;
- ➢ in Europe for Japanese applicants.

https://www.canonfoundation.org/programmes/research-fellowships/

3.4 EUROTALENT Program – CEA

The CEA welcomes foreign researchers within the frame of the European program EUROTALENT, on the four following topics:

- Energy/environment/climate change
- Key enabling technologies
- Life sciences and biotechnology
- > High energy physics, high energy density physics, physics of the universe.

Contract duration is one to 3 years.

All information is available on the following website:

http://eurotalents.cea.fr/

4. INTERNATIONAL PROGRAMS

4.1 EIG CONCERT-Japan

The European Interest Group CONCERT-Japan launches annual call on various priority fields between Europe and Japan. All researchers from the following participating funding agencies are eligible



among: JST (Japan), CNRS (France), BMBF (Germany), MINECO (Spain), RCN (Norway), MITA (Lithuania), SAS (Slovakia), CAS (Czech Republic), MEYS (Czech Republic), BNSF (Bulgaria), NCBR (Poland). The current call for projects concerns Functional Porous Materials. http://concert-japan.eu/spip.php?article49

4.2 Human Frontier Science Program

This international program funds research projects and mobility for postdoctoral or experienced researchers in the field of Life Science. http://www.hfsp.org/