

**Brain imaging and neuroinformatics research
Québec – China – Cuba scientific collaboration**

DEADLINES

Submission of the letter of intent
4: 30 p.m. on July 6th, 2017 (Québec time)

Submission of the complete application
4:30 p.m. on September 8th, 2017
(Québec and Cuba time)

or 4:30 p.m. on September 11th
(Beijing time)

FRQ :

Fonds de recherche du Québec –
Nature et technologies
Marie-Claude Dupont
Program Manager
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NSFC :

National Natural Science Foundation of China
Xiuping Liu
Division Director
Division of American and Australasian Affairs,
Bureau of International Cooperation
83 Shuangqing Road, Haidian District
Beijing 100085, China
liuxp@nsfc.gov.cn

CITMA :

Ministerio de Ciencia, Tecnología y Medio
Ambiente
Armando Rodriguez Batista
Director Ciencia, Técnica e Innovacion
armando@citma.gob.cu

The main objective of this call for proposals is to provide financial support for the advancement of research into the early detection of highly prevalent age-related neuropathologies. More specifically, the program seeks to achieve breakthroughs in human brain mapping by researchers in China, Cuba and Québec by augmenting complementary strengths and expertise and fostering knowledge application.

The call for proposals is jointly led by:

- National Natural Science Foundation of China (NSFC)
- Ministerio de Ciencia, Tecnología y Medio Ambiente (CITMA)
- Fonds de recherche du Québec – Nature et technologies (FRQNT) and Fonds de recherche du Québec – Santé (FRQS). The Québec participation is linked to the Canada First Healthy Brains for Healthy Lives program, which targets the development and piloting of neurotechnologies to promote healthy ageing and the care of age-related brain disorders.

Applications must be submitted to the NSFC, CITMA and FRQNT at the same time.

PROJECT ELIGIBILITY

Priority theme

The program aims to foster the development of brain mapping research projects for the early detection of highly prevalent age-related neuropathologies.

Objective

The objective is to generate knowledge and applications for the early detection of highly prevalent age-related neuropathologies. The projects must meet the following requirements:

- rely on the complementarity of the international investigators' expertise
- have a multimodal approach
- demonstrate clinical application principles that could impact public health
- integrate the use of an informatics platform to foster the recording of the data and scientific activity generated by teams in China, Cuba and Québec

The research projects must be structured to provide unique added value that the researchers, each funded by three agencies, could not have achieved alone in their country of origin.

APPLICANT ELIGIBILITY

Conditions

Structure of the research team :

- Three (3) principal investigators (one in China, one in Cuba, one in Québec) who will represent the research team and oversee the application and project according to the conditions and administrative requirements of the funding agency in their country of origin.
- At least three (3) co-investigators (at least one from China, one from Cuba and one from Québec).
- The research teams that submit a project to the program must be made up of researchers in institutions deemed eligible according to the conditions and administrative requirements of the funding agency in their country of origin.

In Québec

The following individuals are eligible to submit a project as part of this call for proposals.

- university researcher or university clinician researcher
- Postdoctoral trainees are not eligible to apply as a principal investigator or co-investigator.

In addition, principal investigators and co-investigators must:

- be affiliated with a Québec university
- to be employed by a managing institution at the moment of submission. The managing institution must confirm, for every funding year, that the funding holder is still on employment on a continuous basis (with maintain of appropriate visas, when applicable)

Collaborators may reside outside Québec but no funds shall be transferred outside the province.

Research ethics training (Québec)

Investigators who conduct research on human subjects as part of the project or program shall follow basic research ethics training.

Research on human subjects includes initiatives involving:

- living human subjects
- human cadavers and remains
- human tissue, biological fluids, gametes, embryos and foetuses, cells and genetic material
- personal information from medical files (information that makes it possible to identify a person)

To complete the training, researchers must follow levels 1 and 3 of the online tutorial developed by the ministère de la Santé et des Services sociaux (in French: Programme de formation en éthique de la recherche).

Principal investigators and co-investigators who are granted funding must complete the training and provide the FRQNT with proof of completion for the initial payment to be processed.

In China

The following individuals are eligible to submit a project as part of this call for proposals.

- Principal investigator or co-investigator with the status of independent investigators or independent clinical investigators, and working in a university or an institution which has been registered at NSFC.
- Postdoctoral trainees are not eligible to apply as a principal investigator or co-investigator.

In addition, Chinese applicants must meet the following requirements:

- have a senior academic title
- be a grantee of current or former NSFC research project
- not apply for this program if he/she received funding of the International (Regional) Cooperation Research program in last year
- Only one submission per year will be admitted from each applicant for International (Regional) Cooperation Research program offered by NSFC

In Cuba

The following individuals are eligible to submit a project as part of this call for proposals.

- Principal investigator or co-investigator from a Cuban institution recognized as a Research Center or Research Unit associated to a Cuban University, dedicated to research on the health and social services network.
- Principal investigator should have more than 4 years of experience after receiving his PhD degree.

In addition, principal investigator and co-investigators must:

- be affiliated with a Cuban institution
- be a Cuban citizen.

Research ethics training (Cuba)

Investigators who conduct research on human subjects as part of the project or program shall follow basic research ethics training.

Research on human subjects includes initiatives involving:

- living human subjects
- human cadavers and remains
- human tissue, biological fluids, gametes, embryos and fetuses, cells and genetic material
- personal information from medical files (information that makes it possible to identify a person)

The successful training should be certificated by the Ethical Board of the CITMA, the University of Medical Sciences Victoria de Giron, and/or the Cuban Neuroscience Center.

Principal investigators and co-investigators who are granted funding must complete the training and provide the CITMA with proof of completion before the initial payment of the grant be processed.

REQUIRED DOCUMENTS – LETTER OF INTENT

Document transmission

The documents described below must be sent via e-mail to FRQNT program manager Marie-Claude Dupont (marie-claude.dupont@frq.gouv.qc.ca). The documents must follow in a single (1) PDF attachment, except for the Canadian Common CV that can be submitted as a separate PDF document.

Principal investigator in Québec

NOTE: The letter of intent must be submitted to the FRQNT by the principal investigator in Québec

- Letter of intent form
- Canadian Common CV, funding for the FRQNT or FRQS of the principal investigator in Québec
- The names, affiliations and contact information of the principal investigators in China and Cuba and the co-investigators in Québec, China and Cuba
- Detailed contributions, see Directives pour le fichier joint au CV- FRQNT or FRQS toolbox

REQUIRED DOCUMENTS – COMPLETE APPLICATION

Submission of documents

In Québec

Researchers who submitted a letter of registration and whose eligibility was confirmed will receive an e-mail containing a link to the server to submit a complete application. The documents must follow in a single (1) PDF attachment, except for the Canadian Common CV, that must also be submitted in the link, as a separate PDF document. The date and time of deposit will serve as proof of the date and time at which the documents were submitted.

The complete application must be submitted by the principal investigator from Québec and must include:

- Application form, including a description of the project
- For the FRQNT (and FRQS), Canadian Common CV, funding of the principal investigator in Québec
- Detailed contributions, see Directives pour le fichier joint au CV- FRQNT or FRQS toolbox
- Letter of support from the administration of the institution or university department at which the research will be conducted
- Letters of support from collaborators and partners (if applicable)

In China

Chinese co-principal investigators should log onto the NSFC ISIS system and fill in and submit an application form online, as well as send a printed copy of the application form and all the documents required by courier to the address listed in the Chinese CFP. The courier receipt will be considered as proof of the date of sending.

The complete application must be submitted to the NSFC by the principal investigator from China

- Chinese Application form
- Joint English Application Form
- Joint Research Agreement signed by Chinese PI, Canadian PI and Cuban PI
- CVs of the Principal Investigators and Co-principal Investigators (in the format prescribed by the research funding agencies)

In Cuba

The required documents must be submitted to the CITMA by e-mail. Researchers who submitted a letter of registration and whose eligibility was confirmed will receive an e-mail communicating the decision and explaining the steps to submit a complete application. The documents must follow in a single (1) PDF attachment. The date and time at which the e-mail was delivered will serve as proof of the date and time at which the documents were submitted.

The complete application must be submitted to the CITMA by the principal investigator from Cuba, containing:

- Application form, including a description of the project
- ID number, address and personal details of the principal investigator.
- Full Curriculum Vitae of the principal investigator.
- Detailed contributions of the Cuban research team.
- Letter of support from the administration of the institution or university department at which the research will be conducted
- Letters of support from collaborators and partners (if applicable)

NOTE: A joint application form must be submitted to the three agencies.

RESEARCH LOCATION

Choice of location (in Québec): A Québec university, a research group or centre recognized by the FRQNT or FRQS or an establishment designated by the Ministère de la Santé et des Services sociaux (MSSS).

Change of location (Québec): See the [Common General Rules](#) for information on the conditions pertaining to a change in research location and all other changes during the funding period.

FUNDING PERIOD

Period

- Up to three (3) years, non-renewable
- Only one project will be funded for the first call of proposals

Start date

- January 2018
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GRANT AMOUNT

Amount

- The FRQS and FRQNT will contribute up to C\$100 000 to the program (up to C\$300 000 per project for three (3) years).
- The NSFC will contribute up to \$133 000 (equal to 666 600 yuan RMB) to the program (up to \$400 000 (equal to 2 million yuan RMB) per project for three (3) years).
- CITMA will contribute up to CUP 100 000 to the program (up to CUP 300 000 per project for three (3) years).

Sources of funding

- Researchers in Québec shall receive funding from the FRQNT and FRQS.
- Researchers in China shall receive funding from the NSFC.
- Researchers in Cuba shall receive funding from CITMA

Indirect research costs

Québec

The grants awarded under this program may include an additional amount to cover the indirect research costs incurred by institutions. However, the FRQNT and FRQS are not responsible for the amounts paid out by their partners. More information on the reimbursement of indirect research costs will be available when the grants are awarded.

China

The grants awarded under this program will include an additional amount to cover the indirect research costs incurred by the Chinese institutions. Indirect costs will follow NSFC rules on using of indirect costs.

Cuba

The grants awarded under this program may include an additional amount to cover the indirect research costs incurred by institutions. However, the CITMA is not responsible for the amounts paid out by their partners. More information on the reimbursement of indirect research costs will be available when the grants are awarded.

Management and funding rules

The funding shall be managed according to the general rules set out by each funding agency and with which the researchers must comply.

ELIGIBLE EXPENSES

Eligible expenses (e.g. salaries, research material, equipment and other project expenses) are subject to the results and practices set out by the funding agencies.

In addition to the eligible and ineligible expenses listed in the *Common General Rules* of the Fonds de recherche du Québec and in the regulations section of the Web site of the NSFC, the following expenses are eligible:

- Salaries for students (following the agencies' respective rules) and postdoctoral fellows
- Research material and expenses incurred to conduct the research project (these expenses must be justified in the application)
- Expenses incurred to acquire or rent equipment, including maintenance contracts for joint services and shared installations (these expenses must be justified in the application)
- Publication and translation costs
- Costs incurred to apply knowledge and transfer results to users (specifically other investigators, the public, practitioners, decision makers and industry representatives), according to project needs
- Costs related to the project coordination : project administration and justified travel expenses for joint meeting participation

Québec only

- salaries for research associates, assistants and professionals, technicians, IT specialists, healthcare professionals (except physicians) and all other project members who enhance the productivity of the research team.

China only

- NSFC will not fund salaries of the researchers who already have their salaries paid by the home institutes.

Cuba only

- salaries for research associates, assistants and professionals, technicians, IT specialists, healthcare professionals and all other project members who enhance the productivity of the research team.

ASSESSMENT

Letter of intent

The letter of intent aims to:

- establish applicant eligibility, especially for principal investigators, based on the criteria set out by each funding agency
- determine the relevance of the application based on the program objective
- create a peer-reviewed committee of qualified members based on the proposed research topics

The FRQNT will determine the eligibility of Québec researchers. A list of Chinese and Cuban researchers will be sent via e-mail to the NSFC and CITMA, which will confirm the eligibility of each applicant.

Only teams whose letter of intent was deemed eligible will be invited to submit a complete application. The FRQNT will contact these teams by e-mail.

Complete application

The applications will be assessed by a peer committee made up of internal clinical and academic experts selected by the FRQNT, the NSFC and CITMA according to the agencies' respective rules for the assembly of assessment committees. The assessments will be conducted in English.

Assessment criteria

- **Research project**
 - Correlation with the priority theme
 - Clarity of the multimodal approach and scientific excellence of the project
 - Relevance of the main clinical applications
 - Innovative aspects of the proposed neurotechnologies
- **Research team**
 - Quality and achievements of the researchers
 - Complementarity of the researchers' expertise and synergy between the research teams
 - Added value of the collaboration between researchers from Québec, China and Cuba
- **Feasibility**
 - Soundness of the project schedule and relevance of follow-up indicators
 - Scientific and technical achievability of the project, choice of approaches
 - Sustainability of the proposed joint platform
 - Effectiveness of the use of available resources

- **Impacts**
 - Enhanced detection of age-related neuropathologies
 - Impact on care for age-related brain disorders
 - Quality of the anticipated transfer of research results
- **Budget**
 - Justification and soundness of the proposed budget

The results of the assessment process will be announced on November 17th, 2017.

RESEARCH RESULTS AND KNOWLEDGE TRANSFER

Submission of reports

By accepting the grant, recipients agree to submit:

- annual scientific and financial reports by the deadlines set by their respective funding agencies
- a final financial report to their respective funding agencies
- a joint scientific report submitted to the three agencies no later than three months following the end of the grant period

Results dissemination and use by partners

The grant holders must authorize the three funding agencies to use the final research report and results that have been publicly released by the researchers (e.g. in a scientific publication, at a conference, seminar or congress or online) for the purposes of reproduction, translation, reporting and/or communication to the public by any means and all other purposes. This use shall be in compliance with copyright and only for non-commercial purposes.

Knowledge mobilization

The FRQNT and FRQS encourage grant holders to lead and take part in knowledge mobilization activities (transfer, sharing, development, promotion and dissemination) in practice settings and for the general public whenever relevant.

COMMITMENT OF THE APPLICANT

In Québec

In submitting an application, the applicant shall:

- comply with the *Common General Rules*, the Politique de libre accès aux résultats de recherche publiés (FRQS) and the conditions and requirements set out in the program rules
- provide additional documents related to the use of the grant when required by the FRQNT
- comply with the ethics and integrity standards set out in the **Standards en éthique de la recherche et d'intégrité scientifique** (FRQNT and FRQS) and Policy on the Responsible Conduct of Research (FRQ).
- authorize the FRQ to save and use the personal and scientific information included in the application, in accordance with the conditions set out in the Accès aux documents et protection des renseignements personnels policy and on the condition that the individuals

who access the information shall keep it confidential.

In China

In submitting an application, the applicant shall:

- comply with the obligations outlined in NSFC's annual Guide to Programs
- comply with the requirements outlined in the Regulations on the Management of International (Regional) Cooperation Programs of NSFC
- provide additional documents related to the use of the grant when required by the NSFC
- authorize the NSFC to save and use the personal and scientific information included in the application, according to the ethical policies and on the conditions that the individuals who access the information shall keep it confidential.

In Cuba

In submitting an application, the applicant shall:

- comply with the conditions and requirements set out in the form and program rules
- provide additional documents related to the use of the grant when required by the CITMA
- comply with the ethics and integrity standards set out by the CITMA and Ministry of Public Health (MINSAP).
- authorize the CITMA to save and use the personal and scientific information included in the application, according to the ethical policies and on the conditions that the individuals who access the information shall keep it confidential.

COMMITMENT OF THE HOST INSTITUTION

The host institution shall:

- provide functional laboratories and research premises and the basic equipment required to carry out the project
- provide an environment that meets the ethics and integrity standards set out in FRQNT and FRQS documents on scientific ethics and integrity and in the FRQ's Policy on the Responsible Conduct of Research

INTELLECTUAL PROPERTY

The sharing of intellectual property rights and user rights must be in compliance with the rules set out by the three funding agencies.

PARTNERS

China	National Natural Science Foundation of China (NSFC)
Cuba	Ministerio de Ciencia, Tecnología y Medio Ambiente (CITMA)
Québec	Fonds de Recherche du Québec – Nature et technologies (FRQNT) and Fonds de recherche du Québec – Santé (FRQS)