

## NSFC - FRQSC Research Program on Smart Cities and Big Data

Program category: International collaborations

### DEADLINES

Submission of the Letter of intent (Québec researchers only):

**October 16th, 2019, 4:00 p.m. (Montréal time)**

Submission of the Complete Application:

**December, 16th, 2019, 4:00 p.m. (Montréal time) for Québec**

**December, 16th, 2019, 4:00 p.m. (Beijing time) for China**

Contacts
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The purpose of this call for proposals is to support innovative international research projects focusing on *Smart Cities and Big Data*, involving researchers from China and Québec. It will encourage major scientific breakthroughs in the short and medium terms by combining and potentiating the strengths, expertise and sources of structural leverage of both countries, as well as fostering knowledge translation.

This call for proposals is led jointly by:

- National Natural Science Foundation of China (NSFC)
- Fonds de recherche du Québec – Société et culture (FRQSC)

NSFC and FRQSC will act jointly as the call secretariat for proposals.

The conditions and requirements specific to each research funding agency (referred in blue in this document) are available in the Toolbox of the [FRQSC website page](#) and on the [NSFC website](#).

## PROJECT ELIGIBILITY

<b>Priority themes</b>	<p>As a follow-up to the First Workshop organized by FRQSC and NSFC in Montreal in October 2017 on <i>Smart Cities</i> and to the Second Workshop in Nanjing in September 2018 on <i>Big Data and Management</i>, NSFC and FRQSC will jointly launch a call for proposals in the area of Smart cities and Big Data. For this program, the priority themes will be:</p> <ul style="list-style-type: none"> <li>• City Management and Governance</li> <li>• Public Participation and Public Management</li> <li>• Data Sharing and Urban Development</li> <li>• Connected Communities and the Elderlies</li> </ul>
<b>Objectives</b>	<p>Projects should:</p> <ul style="list-style-type: none"> <li>• Be related to fundamental and/or translational research</li> <li>• Bring together researchers from a variety of disciplines, areas of expertise and research settings, and with an array of approaches</li> <li>• Cover fields where the interests and strengths of the researchers are already proven</li> </ul> <p>The project will have to be structured in such a way to lead to a new added value that the researchers, funded by each of the two research funding agencies, could not achieve on their own.</p>

## APPLICANT ELIGIBILITY

<b>Conditions</b>	<p><b>Research team structure</b></p> <p>The research team must be composed of:</p> <ul style="list-style-type: none"> <li>• <b>2 Principal Investigators</b> (one from China and one from Québec) that will represent the project and be responsible of the management of the application as well as of the project's internal scientific management with regards to their respective agency and team members</li> <li>• <b>A minimum of 2 Co-Investigators</b> (1 from China and 1 from Québec) <b>in add of the 2 Principal Investigators</b></li> <li>• Research teams must consist of researchers working in eligible institutions under the conditions and requirements of the relevant research funding agency (see below for more details)</li> <li>• Principal Investigators must demonstrate that they will be adequately involved to ensure the project success. In addition, all team members must demonstrate how they collaborate or intend to collaborate on the proposed research project</li> </ul> <p>NSFC and FRQSC strongly recommend including young researchers among the Co-Investigators.</p> <p>Research team multidisciplinary will be considered an asset.</p>
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<b>Multiple applications</b>	Researchers may only submit one (1) application to this program, either as Co-Principal Investigator <u>OR</u> Co-Investigator.
<b>IN QUÉBEC:</b>	
<b>Conditions</b>	<p>All persons associated with the project as Principal Investigator and Co-Investigator must meet the definition of the following Research Status (see the Definitions section of the <b>Common General Rules</b>):</p> <ul style="list-style-type: none"> <li>○ University Researcher</li> <li>● Postdoctoral trainees cannot apply to this program as Principal Investigator or Co-Investigator. They might be associated as collaborators.</li> </ul> <p>Collaborators may be outside of Québec. However, no funds will be transferred outside the province.</p>
<b>IN CHINA:</b>	
<b>Conditions</b>	<p>This call is open to:</p> <ul style="list-style-type: none"> <li>● Principle Investigator or Co-Investigator(s) with the status of independent investigators or independent clinical investigators, and working in a university or an institution which has been registered at NSFC</li> <li>● Postdoctoral trainees cannot apply to this program as co-Principal Investigators or Co-Investigators</li> </ul> <p>In addition, the Principal Investigator must:</p> <ul style="list-style-type: none"> <li>● Have a senior academic title</li> <li>● Be a grantee of current or former NSFC research project</li> <li>● Not exceed the limit of number of NSFC projects in a certain year. Please refer to NSFC website regarding the eligibility requirements.</li> </ul> <p>(<a href="http://www.nsf.gov.cn/nsfc/cen/xmzn/2019xmzn/xxsq.html">http://www.nsf.gov.cn/nsfc/cen/xmzn/2019xmzn/xxsq.html</a>)</p>

## REQUIRED DOCUMENTS – LETTER OF INTENT (FOR QUÉBEC RESEARCHERS ONLY)

Since the *Letter of intent* will be shared with our NSFC partners, **it must be written in English**. Any other correspondence with FRQSC may be done in French.

### Transmission of the documents:

**Incomplete letters of intent and letters of intent that do not meet the eligibility criteria outlined in this document will be withdrawn from the competition.**

**No extensions will be permitted. After the application deadline, forms that are not already submitted will be automatically rejected.**

All documents described below should **be sent by email** to [Concours.NSFC-FRQSC@frq.gouv.qc.ca](mailto:Concours.NSFC-FRQSC@frq.gouv.qc.ca). Documents should be grouped and sent into a single PDF document.

The date and time of transmission of the email will be considered proof of submission of the *Letter of Intent* application, before the deadline of October 16th, 2019.

**Québec Principal Investigator**

**NOTE: The *Letter of intent* must be submitted by the Québec Principal Investigator to the FRQSC only**

- [Letter of intent form](#)
- [Canadian Common CV, Funding CV version](#) or the FRQSC [updated](#) for Québec's Principal Investigator
- Detailed contributions [updated](#). Consult the [Guidelines for the CV attachment](#) available in the toolbox for detailed contributions content. Detailed contributions must be attached to the email with the form and CV for the submission of the letter of intent

The FRQSC will send an email confirming the acceptance or rejection of the letter of intent to each Québec's Principal Investigator.

## REQUIRED DOCUMENTS – COMPLETE APPLICATION

**Transmission of the documents:**

**FOR QUÉBEC:**

All documents described below should **be sent by email** to [Concours.NSFC-FRQSC@frq.gouv.qc.ca](mailto:Concours.NSFC-FRQSC@frq.gouv.qc.ca). In this same email, CVs of all Québec researchers and their detailed contributions must be attached, grouped into a single PDF document. CVs from the Chinese members must also be included in the PDF document, following the previous ones. The date and time of transmission of the email will be considered proof of submission of the complete application before the deadline of December 16th, 2019.

**FOR CHINA:**

A matching Call for Proposals will be released on the NSFC website. Chinese Principal Investigators should log onto the NSFC ISIS system and fill out 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.

**Principal Investigators**

Please follow the instructions above to send the following documents:

- Application form (including the *Research Project Description*, max. 12 pages)
- CVs of the two Principal Investigators (in the format prescribed by the respective research funding agencies). For FRQSC, use the [Canadian Common CV](#).

**For Québec researchers only:**

- Detailed contributions updated for the Principal Investigator. Consult the [Guidelines for the CV attachment](#) available in the program Toolbox for

	<p>detailed contributions content. Detailed contributions must be attached to the email with the form and CVs for the submission of the complete application</p> <p><b>For Chinese researchers only:</b></p> <ul style="list-style-type: none"> <li>• Collaborative agreement document (see NSFC CFP)</li> </ul>
<b>Co-Investigators</b>	<ul style="list-style-type: none"> <li>• CVs of all Co-Investigators (in the format prescribed by the respective research funding agencies). For FRQSC, use the <a href="#">Canadian Common CV</a>.</li> </ul> <p><b>For Québec researchers only:</b></p> <ul style="list-style-type: none"> <li>• Detailed contributions <u>updated</u> for all Co-Investigators. Consult the <a href="#">Guidelines for the CV attachment</a> available in the program Toolbox for detailed contributions content. Detailed contributions must be attached to the email with the form and CVs for the submission of the complete application</li> </ul>

## TERM OF THE GRANT

<b>Term</b>	<p><b>Up to three years, not renewable</b></p> <p><b>A maximum of four (4) projects will be funded</b></p>
<b>Effective date</b>	<b>April, 2020</b>

## AMOUNT OF THE GRANT

<b>Amount</b>	<p>FRQSC will provide up to CAD \$40,000 per year and per project for three (3) years, plus RIF.</p> <p>NSFC will provide up to RMB 2 million yuan per project for three (3) years).</p>
<b>Source</b>	<p>Researchers from Québec will be funded by FRQSC.</p> <p>Researchers from China will be funded by NSFC.</p>
<b>Management</b>	<p><b>For Québec:</b></p> <p>The list of institutions that can administer funding from the FRQ is limited to the <a href="#">managing institutions</a> recognized by the FRQ.</p> <p>The managing institution is the employing institution of the funding recipient (see section 6.2 of the <a href="#">Common General Rules</a>).</p> <p><b>For China:</b></p> <p>The list of institutions that can administer funding from the NSFC is limited to the <a href="#">NSFC-registered institutions</a>, which include universities, institutes, centers and hospitals.</p>

<b>Indirect research costs</b>	<p><b>For Québec researchers:</b></p> <p>The grants awarded under this program are eligible to receive an additional amount to cover indirect costs of research of the institutions. The details on indirect costs of research reimbursement will be available at the time of the granting.</p> <p><b>For Chinese researchers:</b></p> <p>The grants awarded under this program are eligible to receive an additional amount to cover indirect costs of research of the institutions. The amount of indirect costs is calculated automatically based on the direct costs.</p>
<b>Funding and management rules</b>	<p>Grants will be administered in accordance with the research funding agencies' respective general rules. Applicants are subject to the general rules of the research funding agency that will provide funding.</p>

## ELIGIBLE EXPENDITURES

<p>Eligible expenditures, such as salaries, research material, equipment, other project-related expenditures, as well as travel expenses, are subject to the rules and regulations of the research funding agency that will provide funding.</p>	
<b>Eligible</b>	<p><b>In addition to the list of eligible and non-eligible expenses detailed in section 8 of the FRQ <a href="#">Common General Rules</a>, and in the section of the NSFC funding rules, the following expenses are eligible:</b></p> <ul style="list-style-type: none"> <li>• Master's and doctoral awards or scholarships, postdoctoral fellowships and supplements, and, where applicable, salary for graduate students and postdoctoral fellows</li> <li>• Travel and accommodation costs for Québec researchers going to China (maximum of 1 person / year, reasonable expenses)</li> <li>• Participation to conferences</li> </ul>
<b>Non-eligible</b>	
<b>For Québec only:</b>	<ul style="list-style-type: none"> <li>• Remuneration of the Principal Investigator, Co-Investigators and Collaborators</li> <li>• All indirect expenditures related to layout organization or reorganization, facilities leasing and maintenance</li> <li>• Funds cannot be transferred outside of Québec</li> </ul> <p><b>For more details about non-eligible expenses, see section 8 of the FRQ <a href="#">Common General Rules</a></b></p>
<b>For China only:</b>	<ul style="list-style-type: none"> <li>• NSFC will not fund salaries of the researchers who already have their salaries paid by the home institutes</li> <li>• Funds cannot be transferred outside of China</li> </ul>

## EVALUATION

<p><b>Letter of intent</b></p>	<p>The letter of intent is used to:</p> <ul style="list-style-type: none"> <li>• Establish the eligibility of the applicants, particularly for the Principal Investigators, upon the criteria of each agency (if applicable)</li> <li>• Assess the relevance of the application based on the program’s objectives</li> <li>• Establish peer review committee with relevant expertise</li> </ul> <p>The eligibility of the Québec investigators will be established by the FRQSC. A list of all the Chinese investigators will be provided by email to the NSFC who will confirm their eligibility.</p> <p>Only applicants whose letters of registration are accepted will be asked by FRQSC, by email, to submit a complete application.</p>
<p><b>Complete application</b></p>	<p>The complete applications will be evaluated by a peer review committee composed of international experts from the scientific community chosen by the FRQSC and the NSFC according to the rules in effect for the constitution of review committees.</p> <p><b>N.B.</b> Evaluation reports related to this committee will be shared between two funding agencies.</p>
<p><b>Evaluation criteria</b></p>	<p><b>Research project – 30 %</b></p> <ul style="list-style-type: none"> <li>• Originality and innovative aspects of the project</li> <li>• Compliance with the priority themes</li> <li>• Clarity of the objectives and scientific excellence of the project</li> </ul> <p><b>Research team – 30%</b></p> <ul style="list-style-type: none"> <li>• Scientific quality and track records of the researchers</li> <li>• Complementarity of the researchers’ expertise</li> <li>• Added value of the collaboration involving researchers from China and Québec</li> </ul> <p><b>Feasibility and budget – 20%</b></p> <ul style="list-style-type: none"> <li>• Scientific and technical feasibility of the project</li> <li>• Accuracy, importance and rigour in defining the project’s structure, expected results and milestones</li> <li>• Realistic timeline and adequate budget justification in the proposal</li> </ul> <p><b>Impacts – 20%</b></p>

- Impacts of the project in terms of knowledge and skills acquisition
- Impacts of the project on the development of new concepts and models, instruments, approaches and methods
- Proposed strategy for knowledge translation (towards the scientific community and the general public)

## RESEARCH OUTCOMES AND KNOWLEDGE TRANSFER

<p><b>Submission of reports</b></p>	<p>In accepting the grant, the applicants agree to submit:</p> <ul style="list-style-type: none"> <li>• Annual scientific and financial progress reports following the rules and by the deadlines determined by their respective funding agency</li> <li>• Final financial report to their respective agency</li> <li>• Joint final scientific report required at the end of the term of the grant to both funding agencies</li> </ul>
<p><b>Use and dissemination of the results by the research funding agencies</b></p>	<p>Applicants authorize the FRQSC and NSFC to use the final report and published research outputs (scientific publications, conferences, symposia, conventions or e-publication) for reproduction, translation, execution or public extension purposes through whatever means or for any other non-commercial purposes, provided there is no infringement of copyright law.</p>
<p><b>Knowledge mobilization (For Québec's researchers)</b></p>	<p>The FRQSC encourages awardees to conduct and participate in knowledge mobilization activities (transfer, sharing, development, enhancement and dissemination) with practice settings and the general public, where such activities are relevant. Please read the document <a href="#">Knowledge Mobilization</a> in the toolbox.</p>

## APPLICANT'S AGREEMENT

<p><b>In Québec:</b></p>	<p>In submitting a letter of intent or an application, the applicant must:</p> <ul style="list-style-type: none"> <li>• Comply with the obligations outlined in the <a href="#">Common General Rules</a>, as well as the terms and conditions stipulated in the electronic form and the program rules</li> <li>• Submit additional files linked to the grant, if requested by the FRQSC or NSFC</li> <li>• Comply with the ethical and Responsible conduct of research regulations (as defined in sections 5.3 and 5.4 of the <a href="#">Common General Rules</a>), with the <a href="#">Policy for the Responsible Conduct of Research of the FRQ</a>.</li> </ul>
<p><b>In China:</b></p>	<p>In submitting an application, the applicant must:</p> <ul style="list-style-type: none"> <li>• Comply with the obligations outlined in NSFC's annual Guide to Programs</li> </ul>



- Comply with the requirements outlined in the Regulations on the Management of International (Regional) Cooperation Programs of NSFC
- Authorize the NSFC to retain and use the personal and scientific information included in the application documents provided that the people who are granted access to the information respect its confidentiality

## RESEARCH INSTITUTIONS AGREEMENT

### IN QUÉBEC

The research institutions will provide:

- Functional laboratories and research facilities as well as basic equipment required to carry out the research project
- An environment respectful of the ethics and integrity standards outlined in the [Policy of the Responsible Conduct of Research](#) of the Fonds de recherche du Québec

### IN CHINA

The research institutions will provide:

- Functional laboratories and research facilities as well as basic equipment required to carry out the research project
- An environment respectful of the ethics and integrity standards outlined in the NSFC document [Regulations on NSFC Registered-institution](#)

## INTELLECTUAL PROPERTY

Sharing of intellectual property rights and user rights must comply with the rules of the two research funding agencies.

## CONTACT INFORMATION

<b>In Québec:</b>	<b>Fonds de recherche du Québec – Société et culture</b> Bernard Vandal, Program Manager <a href="mailto:Bernard.Vandal@frq.gouv.qc.ca">Bernard.Vandal@frq.gouv.qc.ca</a>
<b>In China:</b>	<b>National Natural Science Foundation of China</b> Jing Chen, Program Manager Division of American and Australasian Affairs, Bureau of International Cooperation <a href="mailto:chenjing@nsfc.gov.cn">chenjing@nsfc.gov.cn</a>

## PARTNERS

China

National Natural Science Foundation of China (NSFC)

Québec

Fonds de Recherche du Québec – Société et culture(FRQSC)