General Guidelines for the Grant Programs of the IRSST's Research Fund

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PREAMBLE

Firmly established in Québec since 1980, the Institut de recherche Robert-Sauvé en santé et en sécurité du travail (IRSST) is a scientific research organization known for the expertise of its personnel and the quality of the work it carries out and funds. The IRSST is the only organization of its kind serving the combined functions of research centre, granting agency, analytical laboratories, and liaison and knowledge transfer centre.

A new organizational structure was implemented at the IRSST in January 2021 to better support occupational health and safety (OHS) research and address workplace needs as appropriately and quickly as possible. To ensure its leadership position in Québec, the Institute created the Research Fund Division (RFD) tasked with improving its research funding mechanisms by developing and administering new grant programs¹. These new programs will allow the IRSST to continue pursuing its mission as a vector for knowledge and results by enhancing its support to researchers².

The General Guidelines for the Grant Programs of the IRSST's Research Fund provides pertinent and useful information on the Institute's grant programs. This information includes, among other things, a description of the programs, application procedures, process for awarding grants, and policies and regulations applicable to the funded research. The document also presents the values underpinning the RFD to ensure (1) compliance with the laws and regulations respecting access to documents and the protection of personal information, (2) that the funds are awarded and administered with the utmost rigour and transparency and in accordance with the standards and legislation in force, and (3) that the conditions offered make the research results accessible and available to the industry sectors and groups concerned.

The General Guidelines for the Grant Programs of the IRSST's Research Fund applies to the grant programs offered as of fall 2021. These guidelines provide a range of information for individuals wishing to apply for a research grant or for administering institutions that receive and administer the grants awarded by the IRSST's Research Fund.

To supplement the general guidelines, the grant application forms contain instructions specific to each program to help applicants submit eligible applications. In cases where the instructions differ from the guidelines, the instructions take precedence over the guidelines.

² The masculine gender is used throughout this document solely in the interests of readability.



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¹ The 'IRSST continues its support to holders of grants obtained under its former programs (collaborative research, competitive research, and collaborative activity) until the end of the projects.

DEFINITIONS³

Applicant (candidat): Individual applying to the IRSST's Research Fund Division for a grant.

Award (octroi): Funding granted by the IRSST's Research Fund Division.

Co-investigator *(co-chercheur):* Individual who makes a significant contribution to the direction and running of a research project or program.

Collaborator (collaborateur): Individual who brings specific expertise to the running of a research project or program (researcher, scientific professional, technician, student, etc.).

Deliverable (*livrable*): Means by which grant holders report on for the progress of their work during the funding period and on the scientific results obtained by the end of the grant.

Financial partner and other partner (partenaire financier et autre partenaire): Government or granting agency, research centre, or private company contributing to a research project or program, either financially or by providing human or material resources.

Financial report *(rapport financier):* Form used by an institution administering funds received as a grant to account for the expenses related to the award.

Grant (subvention): Financial support awarded to a researcher or research team following a selection and review (or evaluation) process carried out by a committee.

Grant holder, grantee *(titulaire d'une subvention)*: Principal investigator assuming the administrative and financial responsibilities associated with the grant and acting as the team contact person for the IRSST.

Grant program (programme de subvention): Funding mechanism offered and administered by the IRSST's Research Fund Division.

Indirect research costs, or IRCs (*Frais indirects de recherche,* or *FIR*): General costs associated with a research project or program, including costs related to research spaces and associated services. These costs are expressed as a percentage of direct research costs.

Institution (établissement): University or post-secondary educational or research institution located in Québec.

Institutional researcher *(chercheur d'établissement):* Researcher from a Québec research or post-secondary educational institution.

³ Some of the definitions provided in this section refer to the terms used in the application forms for research project grants (letter of intent, protocol) and research program grants (notice of intent, full application).



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Interdisciplinarity (*interdisciplinarité*): Process that brings together researchers from different disciplinary fields or using different research practices around a given subject, method or research question, to shed new light on common or shared issues.

IRSST researcher (chercheur de l'IRSST): IRSST employee with the status of "researcher" or "senior researcher."

IRSST's Scientific Advisory Board, or SAB (Conseil scientifique de l'IRSST, or CS): Board comprised of representatives of workers, employers, and the scientific community who act in an advisory capacity for the IRSST's president-CEO.

Partnership agreement (entente de partenariats): Agreement entered into by two or more parties based on a shared scientific interest in obtaining research results related to occupational health and safety.

Principal investigator (chercheur principal): Individual responsible for a research team and for the intellectual leadership of a research project or program that is the subject of a grant application. The principal investigator must be a Canadian citizen or permanent resident of Canada, have a PhD or the equivalent, and hold a professor or researcher position in a Québec post-secondary educational or research institution.

Related activity (activité connexe): Any scientific or networking activity related to a research program (state-of-the-art review, investigation, focus group, thematic workshop, etc.) and allowing more in-depth exploration of the research orientations.

Research program (*programmation de recherche*): Group of scientific activities integrated around a research theme.

Research project (*projet de recherche*): Group of structured scientific activities aimed at addressing a given research question, of predetermined duration, and whose start and end dates usually correspond to the duration of the grant.

Review committee *(comité d'évaluation):* Panel of experts recognized for their knowledge on the research subjects, methodologies, and disciplinary approaches presented in the grant applications. These experts are required to exercise their functions in an impartial and confidential manner, and are subject to the rules stipulated in the IRSST's *Policy on Integrity*.

Sectors and groups concerned (milieux concernés): Industry sectors and groups that will benefit from the knowledge generated by the research: professional associations and orders, employer associations, joint sector-based associations (known in French as ASPs), union associations, the Commission des normes, de l'équité, de la santé et de la sécurité du travail (CNESST), companies and other organizations, educational institutions, ministries and other government agencies, and the Réseau de la santé publique en santé au travail du Québec (RSPSAT), etc.

Status report *(rapport d'étape):* Form used by the grant holder to report on the progress of the research work carried out during the grant period.



1 IRSST GOVERNANCE AND POLICIES

1.1 Governance

1.1.1 Board of Directors

In terms of governance, the IRSST is headed by a board of directors with an identical composition to that of Québec's Commission des normes, de l'équité, de la santé et de la sécurité du travail (CNESST). Composed of seven representatives each of employers and workers, and a chair, the IRSST's Board of Directors is based on the parity principle (equal labour/management representation). Its members are appointed by the Québec government and manage the Institute's affairs, including its strategic orientations, development framework, and funding.

1.1.2 Scientific Advisory Board

The Scientific Advisory Board (SAB) is a tripartite advisory body composed of four representatives each of employers and workers, six members of the scientific and technical community, and a CNESST observer.

In terms of research, the SAB, which is chaired by the Institute's president-CEO, issues opinions on the relevance and priority of projects and programs that are the subject of funding applications. It also ensures periodic follow-up of work progress with holders of research program grants.

1.1.3 Research Fund Division

The Research Fund Division (RFD) oversees the implementation and management of the OHS research funding programs offered by the IRSST. It is also tasked with supporting the new generation of OHS scientists through the graduate studies scholarship and postdoctoral fellowship program.

At the same time, the RFD is responsible for applying the <u>Ethics Policy on Research Involving</u> <u>Humans</u> and the IRSST's <u>Policy on Integrity</u>.

1.2 Policies

The IRSST has policies and procedures that set the parameters for research, knowledge dissemination, and laboratory services activities and for managing its research grant programs and graduate studies scholarship and postdoctoral fellowship programs.

By accepting a funding award from the IRSST, grant applicants, grant or scholarship/fellowship holders, research teams, research staff, and administering institutions undertake to conduct research responsibly and to comply with the various policies and procedures in effect at the Institute.



1.2.1 Scientific Policy

Based on the guiding principles of the IRSST's mission, the <u>Scientific Policy</u> establishes the general framework for defining the general research orientations, determining the research priorities, defining the means to be implemented to accomplish the mission, and ensuring the scientific quality of the work.

1.2.2 The IRSST's Policy on Integrity

The IRSST's scientific activities take place in an increasingly complex environment with the close participation of workplaces and the input of stakeholders from various sectors, groups, and disciplines. All interactions among these parties must be grounded in a relationship of trust among, on the one hand, all members of the IRSST community, and on the other, between this community and society at large. One fundamental value serves as the foundation for this trust, while ensuring the Institute's broader reach and influence and the credibility of its actions: that value is integrity.

In 2016, the IRSST adopted a policy setting forth the requisite rules of conduct to be adopted to ensure that the research projects can be carried out with full respect for individuals, and in compliance with the IRSST's mission and rules of sound management: the <u>Policy on Integrity</u>. This policy reflects a Canadian and international trend toward providing a clearer framework for the integrity of research practices.

1.2.3 Ethics Policy for Research Involving Humans

The <u>Ethics Policy on Research Involving Humans</u> is a means adopted by the IRSST and its personnel to appropriately address the different dilemmas or concerns associated with research involving humans. The Institute's Research Ethics Committee (REC) supports this process by issuing opinions on the ethical validity of research projects involving humans and carried out by IRSST researchers or by research collaborators with no access to a REC.

1.2.4 Politique sur la propriété intellectuelle (policy on intellectual property)

The <u>Politique sur la propriété intellectuelle</u> (available in French only) covers copyright and patents. This policy is necessary for the IRSST as it is a unique organization that conducts internal research projects led by its own researchers, while also funding external researchers mainly from the university community.

1.2.5 Politique d'édition des publications (publishing policy)

To carry out the component of its mission that involves disseminating knowledge and serving as a scientific reference centre and expert, the IRSST produces various types of content that is made available to its entire client base free of charge. The <u>Politique d'édition des publications</u> (available in French only) establishes the principles according to which its scientific or technical production can yield an official IRSST publication. This policy addresses all IRSST personnel as well as researchers from Québec post-secondary educational and research institutions in the context of IRSST-supported work.



1.2.6 Policy of Open Access to Scientific Literature

Open access to scientific literature promotes broader dissemination of the results of OHS research among the research community and the working world. The IRSST therefore encourages any of its grant or scholarship/fellowship holders to publish the results of their work in scientific journals that support open access or allow free and universal access to the articles on their web sites within one year of their publication. The <u>Policy of Open Access to Scientific Literature</u> is intended to promote open access to the scientific articles resulting from IRSST-funded research.



2 RESEARCH GRANT PROGRAMS

The Research Fund Division (RFD) offers three funding mechanisms: research project grants, research program grants, and call-for-proposals grants. The RFD is responsible for the administrative management of these grants. The following sections describe the objectives of the different funding mechanisms, the eligibility requirements, and the steps in the application process.

2.1 Research Project Grants

2.1.1 Objectives

Research project grants are intended to:

- contribute to the advancement of both theoretical and scientific knowledge and of practices of interest for OHS research;
- maximize the practical benefits in Québec workplaces and its OHS network;
- encourage the training of highly qualified OHS research personnel; and
- foster knowledge dissemination and transfer.

2.1.2 Description of project grants

The IRSST's research project grants are designed to support research on one of the Institute's priority subjects (or subject areas) (see "IRSST's Priority Research Subjects"), an innovative research subject, or an emerging problem. The IRSST seeks projects that help advance knowledge, address needs expressed by workplaces and the OHS network, or target issues identified by researchers and yielding possible avenues or recommendations for improving occupational injury prevention or optimizing the rehabilitation and sustainable return to work of injured workers.

The IRSST encourages an interdisciplinary approach in the execution of research work.

The maximum duration of this type of grant is three (3) years⁴, for an amount ranging from \$25,000 to \$120,000 per year, excluding indirect costs. Projects carried out in partnership or co-funded may also be submitted to the IRSST for funding.

2.1.3 Eligibility requirements

This type of grant serves to fund projects proposed by IRSST researchers and those proposed by researchers from Québec research or post-secondary educational institutions. The principal investigator must be a Canadian citizen or permanent resident of Canada, have a PhD or the equivalent, and hold a professor or researcher position.

⁴ A maximum extension of one year may be granted, but with no additional budget.



2.1.4 Submission and processing of a project grant application

All funding applications must be made using the forms available on the Research Fund Division web page of the IRSST's web site.

- i. Submission of letters of intent: Applicants must submit a <u>letter d'intention</u> [letter of intent] by email to <u>subventions@irsst.qc.ca</u>. In cases where the proposed project is part of a current IRSST-funded research program, the applicant must describe how the funding sought for this project is necessary and complementary to that already obtained.
- **ii. Administrative verification:** The RFD verifies all letters of intent to determine their compliance with the eligibility requirements.
- **iii. Selection of letters of intent by the SAB:** Based on their evaluation of the pertinence and priority nature of the projects proposed, the members of the SAB select the qualifying letters of intent and the applicants are invited to submit a research protocol. All applicants receive the SAB's comments justifying the selection or rejection of their letter of intent.
- **iv. Submission of research protocols:** Applicants whose letters of intent are retained are then invited to submit a research protocol by email to subventions@irsst.qc.ca.
- v. Scientific evaluation of protocols: The research protocols are evaluated by a panel of experts recognized for their knowledge on the research subjects, methodologies, and disciplinary approaches presented in the projects to be evaluated. First, each reviewer evaluates the scientific quality of the projects by examining and scoring the applications according to the evaluation criteria shown in the table below. The panel members then meet to classify the applications by consensus.



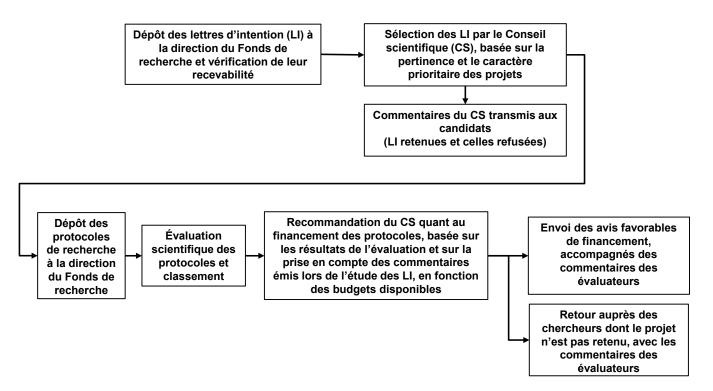
Evaluation Criteria – Research Project Grants

Criterion	Indicator	Weighting*
Scientific quality of the project	 Justification of the problem State-of-the-art review Clarity of the objectives and hypotheses Pertinence and rigour of the methodology Originality and contribution to the advancement of knowledge 	50%
Quality, complementarity, interdisciplinarity of the team	 Leadership and ability of the principal investigator to lead the project Coordination of the proposed research work Competencies and complementarity of the team members' areas of expertise Involvement of students in the performance of the work 	20%
Anticipated benefits and knowledge dissemination	 Importance of the anticipated benefits Means planned to disseminate knowledge 	20%
Pertinence of the budget estimates and realism of the timeline	 Pertinence and justification of the budget Pertinence of the planned material and human resources, including the involvement of graduate students Realism of the timeline 	10%

^{*} A score of 75% or more is required to qualify for funding.

- vi. Final decision on funding of projects: Based on the results of the scientific evaluation and how well the applicants have taken into account the comments issued by the SAB members during their examination of the letters of intent, the SAB selects the projects that will be awarded grants, depending on the available budgets. It sends its recommendations to the President-CEO, who then authorizes the funding of the selected projects.
- **vii. Notice of award:** A notice of award (NOA), along with the reviewers' comments, is sent to applicants whose research projects have been selected. The reviewers' comments are also sent to applicants whose projects were not retained.





Flowchart of the processing of a research project grant application.

2.2 Research Program Grants

2.2.1 Objectives

Research program grants are intended to:

- support the efforts of research teams in implementing a large-scale research strategy;
- foster the advancement of knowledge on a given theme;
- · encourage practical benefits in workplaces;
- support the training of master's and doctoral students, as well as postdoctoral trainees, and encourage the participation of undergraduate students in the execution of research projects whenever possible.

2.2.2 Description of program grants

Research program grants are designed to support research teams in conducting ongoing, structuring programs on a research theme and that include medium- and long-term objectives. The mixed type of funding offered (operating fund and funds to carry out research projects



included in the program) covers a five-year period⁵, for a maximum amount of \$100,000 per year per grant, excluding indirect costs.

To qualify for this type of grant, the research program must focus on one of the IRSST's priority research subjects or subject areas (see (see "IRSST's Priority Research Subjects"), an innovative research theme, or an emerging problem. The program must tie in closely with the needs expressed by workplaces or the OHS network, or identified by the researchers. It must be divided into a few (two or three) complementary research orientations.

The IRSST seeks to support medium-sized research teams (e.g. four to eight members) and encourages an interdisciplinary approach in the performance of research work. A grant awarded for a research program may not cover all the costs involved in executing the program. If need be, teams are encouraged to seek other sources of funding to execute the projects associated with the program. Moreover, a research program may require continuing on beyond the period covered by the grant, depending on the research questions studied and work progress. The teams may submit a new application for a program grant at the end of the funding period of their first program.

2.2.3 Eligibility requirements

To qualify for this type of grant, the research team submitting the application must be led by an IRSST researcher or a pair of researchers, at least one of whom comes from the IRSST. However, the team contact role for the Research Fund Division must be filled by an IRSST researcher.

An applicant may hold only one IRSST research program grant in the capacity of principal investigator, but remains eligible for the Institute's other grant programs. Principal investigators must be Canadian citizens or permanent residents of Canada, have a PhD or the equivalent, and hold a professor or researcher position in a Québec post-secondary educational or research institution.

2.2.4 Submission and processing of a program grant application

All funding applications must be made using the forms provided on the Research Fund Division web page of the IRSST's web site.

- i. Submission of notices of intent: Applicants must submit an <u>avis d'intention</u> [notice of intent] by email, by the deadline, to <u>subventions@irsst.qc.ca</u>.
- **ii. Administrative verification:** The RFD verifies all notices of intent to determine their compliance with the eligibility requirements.
- **iii. Examination of notices of intent by the Scientific Advisory Board (SAB):** The members of the SAB examine the eligible notices of intent, and if need be, send requests for additional information to research teams prior to meeting them.

⁵ A maximum extension of two (2) years can be granted, but with no additional budget.



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- iv. Meeting with members of the SAB: This compulsory step gives applicants the opportunity to present their notice of intent and discuss it with the members of the SAB.
- v. Selection of notices of intent by the SAB: Based on their evaluation of the pertinence and priority nature of the eligible programs, the members of the SAB select the qualifying notices of intent and invite the teams of applicants to submit a full application. All teams receive the SAB's comments justifying the selection or rejection of their notice of intent.
- vi. Submission of full applications: The teams whose notices of intent are retained by the SAB are then asked to submit a full application by email to subventions@irsst.qc.ca.
- vii. Scientific evaluation of full applications: Each application undergoes a scientific evaluation by three experts recognized for their knowledge of the research subject, methodologies and disciplinary approaches presented in the program to be evaluated. The experts must perform this evaluation by examining and scoring the applications according to the following evaluation criteria:



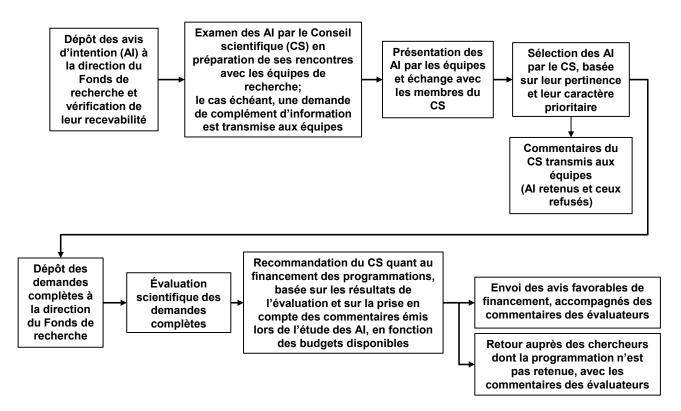
Evaluation Criteria – Research Program Grants

Criterion	Indicator	Weighting*
Scientific quality of the program	 Problem, state-of-the art review, and objectives Originality and contribution to the advancement of OHS knowledge Structure of the program and pertinence of the proposed methodology 	40%
Quality and complementarity of the team	 Leadership and ability of the principal investigator (or both principal investigators) to lead the research program Competencies and complementarity of the team members' areas of expertise Coordination of the proposed work 	30%
Anticipated benefits and transfer of results	 Importance of the anticipated benefits Means planned for disseminating and transferring the results 	20%
Training of highly qualified personnel	Involvement of graduate students and trainees in the performance of the work	5%
Pertinence of the budget estimates and realism of the timeline	 Pertinence and justification of the budget Pertinence of the planned material and human resources Realism of the timeline 	5%

^{*} A score of 75% or more is required to qualify for funding.

- viii. Final decision on funding of programs: Based on the results of the scientific evaluation and how well the researchers have taken into account the comments issued during the examination of the notices of intent, the SAB selects which programs will be funded, depending on available budgets, and sends these recommendations to the President-CEO. She authorizes the funding of the selected programs.
- **ix. Notice of award:** A notice of award (NOA), along with the reviewers' comments, is sent to the research teams whose programs have been selected. The reviewers' comments are also sent to the teams whose programs were not selected.





Flowchart of the processing of a research program grant application.

2.3 Call-for-Proposals Grants

Call-for-proposals grants are intended to support research on themes predetermined by the IRSST. Each call for proposals includes a context and objectives related to a theme. The competition date and grant duration are defined according to the aim of the call for proposals.

These grants serve to fund projects submitted by IRSST researchers and those submitted by researchers from Québec research or post-secondary educational institutions. The principal investigator must be a Canadian citizen or permanent resident of Canada, have a PhD or the equivalent, and hold a professor or researcher position.

Detailed information on the processing and evaluation of applications for this type of grant is provided when each call for proposals is announced.



3 IRSST'S PRIORITY RESEARCH SUBJECTS

The priority research subjects for the project and program grant competitions launched in 2021 are those described in the IRSST's *Five-Year Scientific and Technical Production Plan 2018-2022*. Added to these are subjects related to emerging OHS problems. The research subjects for the call-for-proposals grant competitions are announced when these competitions are launched.

The research subjects prioritized by the IRSST fall under four research fields:

- Sustainable Prevention and Work Environment
- Chemical and Biological Hazard Prevention
- Mechanical and Physical Risk Prevention
- Occupational Rehabilitation

3.1 Sustainable Prevention and Work Environment

The goal of this research field is to enhance understanding of the social, demographic, organizational, and technological factors that impact the occurrence of work-related injuries from a perspective of sustainable prevention of OHS problems, ultimately to facilitate healthy maintenance at work. The development of OHS management tools and workplace intervention strategies constitutes an important aim, as do the development and application of measurement methods and evaluation tools.

The following subjects are prioritized in this research field:

- Work-related road accidents
- Cohabitation of diverse populations in the workplace
- Prevention cultures and OHS
- Development of methods for evaluating exposure and assessing risks
- OHS issues arising from the growth in services
- Evaluation of interventions in the workplace
- · Exoskeletons in the workplace
- Integration of young workers into the labour market
- Material handling
- Prevention and aging
- Integrated prevention in SMEs
- Digital revolution (4.0): opportunities and risks
- MSDs related to office automation
- Knowledge transmission and training



3.2 Chemical and Biological Hazard Prevention

The goal of this research field is to help prevent occupational diseases and adverse health effects, and to improve and maintain the health and well-being of workers exposed to chemical substances and biological agents. The preferred approaches are innovation, generating new knowledge, conducting critical assessments, and using existing knowledge. Research efforts, often interdisciplinary in nature, focus on primary prevention and designing adapted tools for use in enterprises, particularly by aligning with the needs identified by the CNESST, its partners, and Québec workplaces. By extension, knowledge translation and information dissemination are also advocated.

The following subjects are prioritized in this research field:

- Sensitizing and irritating agents
- · Asbestos and other mineral particles
- Occupational carcinogens
- Multiple exposures
- Microorganisms in the workplace
- Nanoparticles and ultrafine particles
- Pesticides
- Respiratory protection
- Emerging risks (climate change, green jobs, etc.)
- Ventilation and air quality

3.3 Mechanical and Physical Risk Prevention

The goal of this research field is to propose (1) methodological and metrological tools or simulations and (2) test and assessment methods to help professionals in the workplace better diagnose problems and better assess risks. It also aims to create selection support tools and tools for improving and designing prevention solutions (reducing risk at the source, collective and personal protective equipment), taking the human factor into account.

The following subjects are prioritized in this research field:

- Assessment of machine-related risks
- Lockout (equipment)
- Acoustic barriers and materials for noise control
- Smart protective equipment
- Evaluation of suspension seats
- Alternative methods to lockout
- Hand power tools
- Prevention of slips and falls in outdoor work environments
- Personal hearing protection
- Protection against falls from heights
- Resistance of protective gloves and clothing to mechanical and physical hazards



- Collaborative robotics
- Safety of mobile equipment
- Audible alarm signals in the workplace
- Shoring and shielding systems

3.4 Occupational Rehabilitation

The goal of this research field is (1) to help prevent or reduce the risks of long-term disability in workers who have sustained an employment injury, and (2) to support both the CNESST's service offer and clinical and workplace interventions, whether in the post-injury return-to-work (RTW) or maintenance-at-work (MaT) context. More specifically, using evidence-based data, it supports the safe and sustainable return to work of injured workers. It does so by studying the individual, organizational, administrative, and healthcare system-related factors that facilitate or hinder a smooth RTW or MaT process, and by developing methods of intervention for rehabilitating workers and reintegrating them into the labour force.

The following subjects are prioritized in this research field:

- Functional limitations
- Integrated prevention and adapting solutions for small enterprises
- Protection of and support for workers in vulnerable situations
- Occupational reintegration of workers into a job other than their pre-injury job
- Risk factors for long-term disability among workers
- Support for interventions in clinical settings
- Support for return-to-work and maintenance-at-work (job retention) processes in the workplace



4 ELIGIBLE AND NON-ELIGIBLE EXPENSES

Research grant holders and their administering institutions are responsible for appropriately managing the funds in accordance with the usual rules of sound accounting management and the rules set forth in this document. Use of an award in a manner that contravenes the present general rules constitutes a breach of the responsible conduct of research (see the IRSST's <u>Policy on Integrity</u>). Any amounts used to pay for non-eligible expenses must be reimbursed to the IRSST's Research Fund, and the improper management of funds may result in sanctions.

The eligible and non-eligible⁶ expenses for the grant programs offered by the IRSST's Research Fund Division (RFD) are detailed below.

4.1 Human Resources

The salaries of researchers and collaborators are not eligible if the latter are already been remunerated by their institution of affiliation.

Salaries included in the budget must be established according to the respective standards of the institutions of affiliation concerned.

The RFD authorizes the payment of stipends to students in a research project context, for a maximum of \$15,800 per year for the master's level, \$18,950 per year for the doctoral level, and \$42,750 per year for postdoctoral training, in accordance with Canada's *Income Tax Act* and the rules in effect in the institution of affiliation. However, the beneficiary of this stipend shall at no time be considered an IRSST scholarship recipient.

Holding an IRSST scholarship concurrently with a salary supplement offered by the scholarship holder's supervisor for the purpose of allowing the recipient to work exclusively on his or her research project is permitted, on condition that this supplement (in the form of a stipend) be, at the maximum, equivalent to the scholarship supplement amounts permitted by the IRSST (\$4,375, annually, for the master's level, \$5,250 for the doctoral level, and \$11,250 for postdoctoral training). In addition, subject to approval from their research supervisor, scholarship holders may accept a relevant remunerated task in their research field not exceeding 225 hours per session.

4.2 Purchase or Lease of Equipment

All equipment needed to conduct the research is eligible.

Equipment costing less than \$15,000 before taxes becomes the property of the institution that receives the grant, unless a specific agreement otherwise has been signed.

⁶ For questions about the eligibility of an expense, applicants or award holders must communicate with the <u>direction du Fonds de recherche de l'IRSST</u>.



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Equipment costing more than \$15,000 before taxes becomes the property of the IRSST, unless a specific agreement otherwise has been signed. Details and a justification for any equipment costing more than \$15,000 are required, and two bids must be included.

4.3 Materials, Consumables, and Supplies

Expenses incurred for materials, supplies, certain services provided by the grant holder's institution, and consumables directly related to the execution of the research are eligible.

4.4 Travel Costs Related to Execution of the Research

The costs of travel required by research team members and related to the execution of a project or program are eligible, in accordance with the current scale in the grant holders' institutions.

Conference fees are accepted and must be accounted for as expenses related to scientific knowledge dissemination (see 4.6).

4.5 Compensation for Participants in the Research

Amounts planned as compensation payable to participants in the research are eligible.

Compensation offered to a participant must have symbolic value. It must not constitute an incentive for a person to take part in a research activity when it is reasonably conceivable that he or she would have refused to participate without the compensation offered.

When a participating organization undertakes to release workers to allow them to participate in a research project, monetary compensation is not eligible, unless specific conditions apply.

4.6 Expenses Related to Scientific Knowledge Dissemination

Expenses incurred by researchers and collaborators only are accepted.

Expenses incurred for presentations at conferences, including registration fees and travel and subsistence (meals and accommodation) costs, are eligible. The IRSST reimburses conference attendance fees, up to a maximum annual amount of \$5,000 for all members of the research team, as of the second year of the execution of a project or as of the first year of the execution of a program. However, expenses incurred for disseminating results from a prior study funded by the IRSST cannot be reimbursed.

Expenses incurred for presentations to the sectors or groups concerned include the travel and subsistence costs of members of the research team for meetings held outside their workplace. These expenses must be specified.

The costs of translation and publication (graphic design, for example) associated with documents other than the reports published by the IRSST are eligible.

4.7 Professional Honoraria and Other Contracts



In cases where a research project of program includes tasks that cannot be performed by the research team, the services of consultants or specialized companies may be enlisted. These expenditures must be entered in the budget as professional honoraria or contracts.

4.8 Indirect Research Costs (IRCs)

As a granting agency, the IRSST accepts to cover the IRCs associated with executing the research projects and programs it funds. In the case of a co-funded grant, only the IRSST's contribution is factored into the calculation of the IRCs covered by the Institute. Each of the other financial partners must assume its share of the IRCs. When funds are transferred between institutions in the context of a grant, the institution administering the award is responsible for transferring the amounts associated with the IRCs.

The IRCs must be calculated solely on the basis of the direct research costs. Only the following budgetary items are eligible when calculating the IRCs:

- Human resources
- Purchase or lease of equipment
- Materials, consumables, and supplies
- Travel costs related to execution of the research

The maximum rate accepted for indirect research costs is 27% of the direct costs.

4.9 Other Operating Expenses (for IRSST Researchers Only)

Certain operating expenses may be covered directly by the IRSST's internal services budgets, including:

- Travel costs
- Translation costs
- Capital assets
- Attendance at conferences or other scientific knowledge dissemination events

These expenses, if any, must be itemized on the research project or research program application forms in the section provided for this purpose. It is important to discuss the expenses entered with the department head before submitting the application. These expenses may **not** be included in the total project or program budget.



5 PROVISIONS RELATED TO FUNDING AND EXECUTION OF THE RESEARCH

5.1 Notice of Award

A notice of award (NOA) is emailed to the applicants whose research project or program has been selected. These applicants are asked to confirm their acceptance within 10 working days of receiving this notice. Upon their acceptance of the offer, they then receive a letter of award, along with a timeline and the grant instalment payment procedures. Applicants who do not respond to the funding offer within the prescribed time limit are deemed to have refused the offer.

By accepting a funding award from the IRSST's Research Fund Division (RFD), the research teams and administering institutions undertake to comply with the policies and procedures in effect. The research work must be conducted in compliance with the IRSST's current policies (see Policies).

5.2 Announcement of Results

The results are published on the IRSST's web site on the dates announced when the competitions are launched.

5.3 Instalment Payments

The first instalment is paid within a maximum of 30 working days of acceptance of the grant. The other instalments (except for the final one) are paid annually according to the payment procedures indicated in the letter of award send to the grant holder.

The final instalment is paid as follows:

- For program grants, 20% of the budgeted amount for the last year of funding is paid only upon acceptance of the end-of-program administrative report.
- For project grants, 15% of the total funding amount is paid only upon acceptance of the final deliverable.

5.4 Deadline for Using the Funds

Research funds awarded for activities such as correcting the final deliverable, presenting results at conferences, and meeting with information intermediaries and partners in the study, may be used for up to six (6) months after the date on which the final deliverable is submitted.



5.5 Transfer of Funds between Institutions

In the event that a grant holder changes administering institutions, the funds granted may be transferred to the person's new institution. The balance is transferred and subsequent instalments are sent to this new institution. The applicable portion of the IRCs is also transferred. Financial reports may be required at the time of the transfer.

5.6 Major Changes in a Currently Funded Program or Project

Any major changes made in a current program or project, i.e., in the direction of the research work, composition of the research team, or budget allocations to the different budgetary items, are considered major changes. IRSST grant holders must inform the RFD of any major changes as soon as they become aware of them. The RFD analyzes the request and renders its decision regarding the proposed changes.

5.6.1 Change in direction of the research work

A change in the direction of the research work refers to a change in the objectives or methodological approaches that differs significantly from what was accepted during the evaluation of the scientific quality of the project or program. Examples are reducing the sample size, adding or removing a research component, or changing the data analysis procedure.

5.6.2 Change in the research team

A change in the research team includes the definitive departure or prolonged absence of one of its principal investigators, resulting in the person's inability to carry out the work as planned.

5.6.3 Change in budget allocations to the different budgetary items

Any change in the budget allocations to the different budgetary items that exceeds 10% of the amount of the grant or that is more than \$15,000 is considered a major change and must immediately be brought to the RFD's attention.

Detailed information on the steps to follow if a major change is made to a current project or program is provided in the following procedure: <u>Modification importante à un projet ou à une programmation de recherche en cours</u>.

5.7 Suspension or Termination of a Research Program or Project

In cases where serious problems arise during the execution of a research program or project, the grant holder must immediately inform the RFD thereof. The RFD analyzes the situation and, if the problems are significant enough to raise questions about whether the work should be continued or not, it decides if the research program or project should be suspended or terminated.

5.7.1 Suspension of the research work

Suspension of the research work means that the work is temporarily halted for a reason that is deemed valid, for example: internal resources unavailable for a prolonged period of time,



prolonged absence of the principal investigator or of an important member of the research team (illness; maternity, paternity, or caregiver leave), breach of the ethical conduct of research involving humans or breach of integrity by a member of the research team, or a major incident.

5.7.2 Termination of the research work

Termination of a program or project means that the research work is definitively stopped and may not be resumed. The reasons for terminating the work must be significant enough to warrant the RFD taking such a measure, for example: withdrawal of the principal investigator with no possibility of a replacement, serious breach of the ethical conduct of research involving humans or breach of integrity by a member of the research team, withdrawal of a financial partner with no possibility of a replacement, or a serious accident.

The procedure titled <u>Suspension ou annulation d'un projet ou d'une programmation de recherche</u> details the steps to follow in this type of situation.

5.8 Status Report on a Funded Research Program or Project

Status reports provide a means of tracking the progress being made in research work subsidized by the IRSST's Research Fund and of ensuring that the work under way corresponds to that described in the research program or protocol.

The submission dates for status reports are indicated in the payment procedures outlined in the letter of award that is issued following acceptance of a grant. Researchers or research teams that accept a grant undertake to adhere to the timeline for submitting status reports.

The status report form for a research program or project can be downloaded from the IRSST's web site.



6 RESEARCH ETHICS AND ENVIRONMENTAL IMPACTS

6.1 Research Ethics

The holder of a research grant awarded by the RFD must subscribe to best practices in terms of the ethical conduct of research involving humans. This condition applies to all research involving human participation that is subsidized by the IRSST's Research Fund, whether it involves new data collection or the use of data collected during prior research projects (secondary use of data). The recruitment of human participants is strictly contingent upon approval from a research ethics committee (REC) on research involving humans.

6.1.1 Research ethics evaluation

Based on the IRSST's <u>Ethics Policy for Research Involving Humans</u>, the IRSST's REC assesses adherence to the guiding principles on the ethical conduct of research projects that involve human participation and are led by IRSST researchers or research collaborators with no access to a REC. In cases of research conducted in collaboration with researchers from Québec research or educational institutions, or research led solely by collaborators from such institutions, the ethics evaluation is performed primarily by the REC of the research grant holder's administering institution.

Human participation involves mainly:

- all forms of experiments carried out in laboratories or workplaces;
- conducting interviews or surveys;
- administering questionnaires;
- observing people or groups;
- meetings with individuals who can provide personal or private information;
- consulting data that includes personal information;
- · using human biological materials; and
- making secondary use of data.

It is important to note that the REC must study **research projects**, and that it may not issue ethics approval for **research programs** in which several research projects or related activities are planned. A research project may have several components (i.e. intervention or action aimed at collecting data from people participating in the study).

In the context of a research program, **each** project or related activity requiring the participation of humans, use of human biological materials, or secondary use of data must undergo evaluation by the REC.

In addition, the application of the rules set forth in the IRSST's <u>Ethics Policy for Research Involving Humans</u> in no way exempts researchers from the obligation to comply with the relevant legislation and, as the case may be, the rules of professional conduct dictated by their associations or professional corporations.



6.1.2 Availability of the funding

The RFD is responsible for ensuring that a project requiring human participation and conducted under a grant is approved by the IRSST's REC or by another ethics committee recognized by the Institute, before the funding can be disbursed to the grant holder. In cases where a portion or the full amount of a funding award is transferred to the institution administering the grant, the latter must verify that the ethics certificate is valid before releasing the funds received.

The recruitment of human participants is strictly contingent on approval from a research ethics committee. However, in the context of a research project, a portion of the award may be advanced for preliminary work before enlisting the participation of humans, obtaining personal data, or collecting biological materials. In this case, it is recommended that initial contact be made with the REC at the start of the project. To receive the first portion of the award, the grant holder must commit, in writing, not to recruit participants or use personal data or biological materials without obtaining prior approval from a REC.

6.1.3 Requesting an ethics certificate

In compliance with the <u>Ethics Policy for Research Involving Humans</u>, holders of an IRSST grant entitling them to carry out a project or related activities involving the participation of humans are required to:

- read the Policy;
- apply the ethics rules prescribed in this policy in all aspects of their research;
- obtain the requisite approvals from an REC before recruiting participants, collecting or officially accessing data on participants, or collecting human biological materials;
- adhere to the procedures described in their research protocol, and to any additional commitments conveyed to the REC;
- disclose any actual, potential, or perceived personal conflicts of interest, as well as any
 institutional conflicts of interest, that may influence the research results, whether regarding
 themselves or any member of their research team;
- document, in the status reports, how their ethical obligations have been respected;
- inform the REC of any changes that may impact participants or their participation in the research project;
- inform the REC of any unforeseen events or incidental findings that may increase participants' risk level;
- submit an annual request to the REC for renewal of their ethics certificate; and
- submit a final report to the REC upon completion of the project.

The IRSST's REC makes its evaluation based on the duly completed *Formulaire de demande d'évaluation d'un nouveau projet de recherche* [application form for evaluation of a new research project]. The list of documents that must be included with this form is available on the <u>Research Ethics Committee</u> page of the IRSST's web site.



6.2 Environmental Impacts

When applying for funding, applicants must mention any risk of environmental impacts that the research may pose. If such is the case, they must describe the nature of these potential impacts, as well as any planned mitigation and monitoring measures. While not taken into consideration during evaluation of the scientific quality of a research project or program, this information is essential when the environmental impacts could have serious or major consequences in terms of their duration or repercussions. Moreover, grant holders and their institutions are responsible for ensuring that the project is carried out responsibly and in compliance with current environmental standards. If applicable, the researchers must obtain any requisite permits, licences, and authorizations prior to beginning their research.



7 INTELLECTUAL PROPERTY

The IRSST's <u>Politique sur la propriété intellectuelle</u> (in French only) guarantees the fair and equitable recognition of the respective rights of the IRSST's researchers, researchers from Québec research or post-secondary educational institutions, and research partners, as the case may be. It therefore provides a clear statement of intellectual property principles so as to preserve harmonious relations among all those involved in creation and invention activities.

It is important to note that IRSST personnel are subject to the *Politique interne sur les droits* d'auteur and to the *Politique interne sur les brevets*, as agreed in the IRSST-CUPE collective agreement, local number 2957.

The IRSST's *Politique sur la propriété intellectuelle* applies to:

- researchers from Québec research or post-secondary educational institutions, whether researchers, scientific professionals, research assistant, or technicians;
- IRSST personnel, who contribute, with their resources, to the execution of all types of activities resulting in the creation of products with related intellectual property rights; and
- third parties, who assist in carrying out such activities.

The Policy covers the following aspects:

- confidentiality
- disclosure and publication of results
- intellectual property in the context of funded or contractual research
- intellectual property in the context of research conducted exclusively by IRSST researchers
- framework agreements
- specific agreements

IRSST grants come out of the funding it receives from the Commission des normes, de l'équité, de la santé et de la sécurité du travail (CNESST). The spinoffs derived from these investments (e.g. commercialization, patents) must enable workplaces to identify risks and eliminate dangers to workers' health, safety, and physical well-being, at the source and inasmuch as possible.

Holders of a funding award from the IRSST's Research Fund Division must formally undertake to comply with the *Politique sur la propriété intellectuelle*. They must further undertake to disseminate their research results publicly and quickly and to mention the assistance received from the IRSST's RFD.

Moreover, the RFD does not fund research whose results must remain secret. Any research subsidized in whole or in part by the Fund may not be the subject of a confidentiality agreement that would prevent dissemination of its results (subject to a reasonable timeframe for ensuring protection of intellectual property rights, such as a patent). Lastly, intellectual property issues must not result in the prevention of, or undue delay in, a doctoral thesis defence.



8 ACCOUNTABILITY

All institutions, researchers, or teams that accept a grant from the IRSST's RFD undertake to comply with the deadlines for submitting the deliverables itemized in the appendix to the letter of award, as well as with the IRSST's report presentation requirements.

8.1 Financial Report

All institutions and all researchers or teams from a Québec research or post-secondary educational institution that have received a grant from the RFD are required to submit a financial report by December 31 of each year. As a general rule, the financial report must mention the name of each person remunerated from the grant, including students, as well as the amounts paid to them and the period covered by this remuneration. The financial report must also document travel expenses, and if applicable, any equipment and supplies purchased with the grant money.

The RFD reserves the right to require a financial report at any time during the execution of a research program or project. Additional information about expenses may also be requested after the financial report has been submitted. These supplementary documents must be submitted within 15 working days of the request.

8.2 Deadline for Using the Funds

Research funds awarded for activities such as correcting the final deliverable or presenting results at conferences may be used up to six (6) months after the date on which the final report is submitted

8.3 Unspent Balance

Any funds not spent during the funding period must be returned to the IRSST within three months of the deadline for using the funds.

To ensure sound management of the research funds, the IRSST reserves the right to share information on the applications it receives with other funding bodies (to prevent duplicate funding, for example).



9 DELIVERABLES

A deliverable is a means by which grant holders report on their work progress during the funding period and on the scientific results obtained at the end of the grant. Grant holders must therefore submit deliverables by the deadlines specified by the IRSST's Research Fund Division. Different types of deliverables are accepted, depending on the grant obtained. They must be written in French.

9.1 Deliverables for Research Project Grants

During the funding period, holders of project grants must submit:

- a status report midway through projects lasting more than one year; and
- a list of scientific papers presented at conferences and of all networking and dissemination activities in which the grant holders and research team members have participated (to be submitted annually).

At the end of their project, holders of project grants must submit a final deliverable in one of the following formats:

- a **scientific research report** of a maximum of 75 pages, including the bibliography and appendices. This report will be peer-reviewed before being published by the IRSST;
- a synthesis research report of a maximum of 15 pages, excluding the bibliography, summarizing the work carried out as well as the main results obtained and presented in published articles (or pending publication) in scientific journals. These articles must be appended to the report, along with a French summary of any articles written in English. This report will not be peer-reviewed, but will be published by the IRSST;
- a methodological research report of a maximum of 30 pages, excluding the bibliography
 and appendices, describing the knowledge production process for the purpose of preparing
 a deliverable in a specific format such as a guide, information sheet, utility program, or
 elements of a web site. A team in the IRSST's Communications, Strategic Watch, and
 Knowledge Mobilization Division may make the content of this report into a product for
 workplaces during a subsequent activity. This research report will be peer-reviewed before
 being published by the IRSST;
- a research report on the development of a method for assessing worker exposure, including a contextualization of the process (maximum of 15 pages), description of the method developed, and appendices presenting tables or figures showing the validation of the method. This report will be peer-reviewed before being published by the IRSST.



9.2 Deliverables for Research Program Grants

During the funding period, holders of a program grant must submit:

- a status report at least 30 working days before the follow-up meeting where they will present it to members of the Scientific Advisory Board (predetermined frequency);
- a list of scientific papers presented at conferences and of all networking and dissemination activities in which the grant holders and research team members have participated (to be submitted annually).

In addition, **throughout the funding period**, holders of program grants must prepare to submit deliverables according to the nature of the work proposed, in one of the following formats:

- a **scientific research report** of a maximum of 75 pages, including the bibliography and appendices. This report will be peer-reviewed before being published by the IRSST;
- a synthesis research report of a maximum of 15 pages, excluding the bibliography, summarizing the work carried out as well as the main results obtained and presented in published articles (or pending publication) in scientific journals. These articles must be appended to the report, along with a French summary of any articles written in English. This report will not be peer-reviewed, but will be published by the IRSST;
- a methodological research report of a maximum of 30 pages, excluding the bibliography
 and appendices, describing the knowledge production process for the purpose of preparing
 a deliverable in a specific format such as a guide, information sheet, utility program, or
 elements of a web site. A team in the IRSST's Communications, Strategic Watch, and
 Knowledge Mobilization Division may make the content of this report into a product for
 workplaces during a subsequent activity. This research report will be peer-reviewed before
 being published by the IRSST;
- a research report on the development of a method for assessing worker exposure, including a contextualization of the process (maximum of 15 pages), description of the method developed, and appendices presenting tables or figures showing the validation of the method. This report will be peer-reviewed before being published by the IRSST.

At the end of their funding period, holders of a program grant must submit:

• An administrative-type report (or end-of-program form) documenting all the work done in the program and its achievements, including reports produced, articles published (or pending publication) in scientific journals, papers presented at conferences, and networking or knowledge diffusion activities. This report must also describe the progress made, the advancement of knowledge on the research theme studied, and the tangible benefits for workplaces, as the case may be. It must be accompanied by all the deliverables produced during the program. It will not be peer-reviewed and will not be published by the IRSST.

9.3 Mention of the Grant

Grant holders must mention the financial support received from the IRSST and affix the Institute's logo when applicable, in all reports, articles or papers arising from the grant.



Grant holders are solely responsible for the content of their work. The fact that the IRSST's financial support is acknowledged in a production deriving from a grant in no way signifies the Institute's endorsement of its content.

