

Policy for the Responsible Conduct of Research

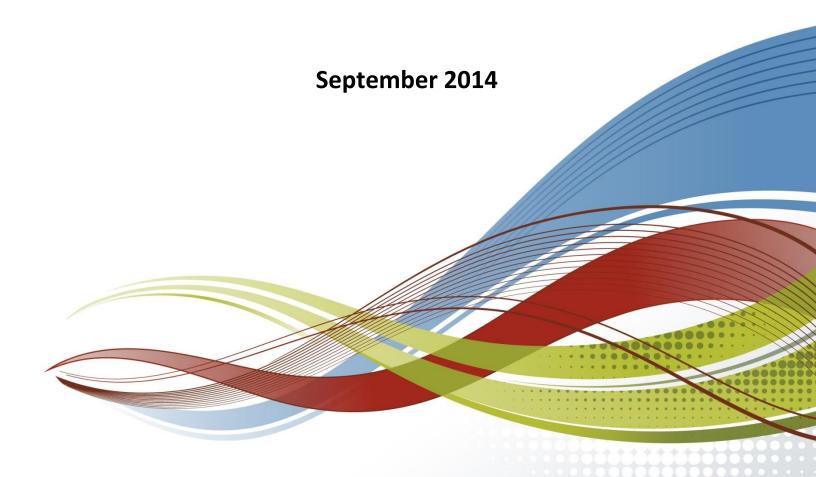




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Fonds de recherche du Québec

Introduction

Preamble

The development of knowledge and innovation is a project that lies at the heart of Québec's social and economic development. The strategic importance of research for the province is reflected in the significant resources and number of stakeholders dedicated to its practice. This has led to the development of policies aiming to provide stewardship and to promote research, such as the National Research and Innovation Policy (PNRI, 2013)¹. This social project will only succeed through the promotion and continued support of research excellence. The quest for such excellence rests on the responsible conduct of research by all actors involved. It is therefore imperative to carefully consider the values that guide such conduct and the best practices that arise therefrom.

The Policy for the Responsible Conduct of Research (hereinafter, the Policy) bears witness to the importance attached to this issue by the Fonds de recherche du Québec (Fonds de recherche Nature et technologies, Fonds de recherche Société et culture and Fonds de recherche Santé, hereinafter, the FRQ) and their commitment to promoting responsible conduct in all research activities they fund. Indeed, the Fonds have long been actively engaged in supporting the responsible conduct of research in their respective scientific communities. Now, through the development of a common policy, they wish to affirm its importance with a single voice. Furthermore, the Fonds de recherche wish to formulate clear expectations when it comes to the responsible conduct of research, without which one cannot meaningfully talk of research excellence—an essential condition for the public funding of research activities. The very role of the FRQ places them in a privileged position to take part in the discussion on best research practices and to promote a global culture of ethics which, like a common thread, shall run through all research activities conducted in Québec. The best way to achieve this appears to be through education and training. As key actors in the public funding of research, the FRQ have a responsibility to develop a frame of reference for the research activities they fund and to promote education and training initiatives aimed at research actors across Québec.

Through this approach, the FRQ wish to underscore the confidence they place in the researchers, students, and institutions (including research personnel and fund managers) they support. This confidence lies at the heart of the discussion that led to the drawing up of this policy and is an integral part of the approach to ethics and research integrity adopted by the FRQ. It may also be assumed that a culture of **responsible conduct of research** can only prevail if it is rooted in the values that drive research. These values form the very pillar of a research ethos which allows the various actors to communicate, agree, share and work together for the advancement of knowledge and to reach the highest standards of research excellence. However, research actors can at times find themselves in situations where other values come into conflict with ethics, compromising the responsible conduct of research. This policy reaffirms the primacy of the values associated with responsible conduct and

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¹ Ministère de l'Enseignement supérieur, de la Recherche, de la Science et de la Technologie, Politique nationale de la recherche et de l'innovation, October 2013. This policy is in effect from 2014 to 2019.

provides research actors and environments with the necessary tools to make choices compatible with research excellence, under all circumstances.

Research takes place in an increasingly complex environment, involving multidimensional and cross-border collaborations and partnerships. Seeking to adopt a vision of responsible conduct of research that would be consistent with national and international best practices in drawing up this Policy, the FRQ chose to align itself with global trends in responsible conduct of research, as described by the European Science Foundation in its *European Code of Conduct for Research Integrity*² and the *Singapore Statement on Research Integrity*³. In particular, the FRQ subscribe to the positive vision of research integrity set out in this statement, whose underlying principles are defined as honesty in all aspects of research, professional courtesy and fairness in working with others, good stewardship of research on behalf of others and accountability in the conduct of research. On the other hand, the FRQ drew on the 2010 report *Honesty, Accountability and Trust: Fostering Research Integrity in Canada* by the Council of Canadian Academies⁴ in formulating their vision of the responsible conduct of research and the best practices that define it. By the same token, the FRQ were also largely inspired by the federal funding agencies' guidelines for the responsible conduct of research (*Tri-Agency Framework: Responsible Conduct of Research*⁵), allowing for a simpler and more harmonious interpretation for Québec researchers who must comply with both policies.

1. Objectives

This Policy unites and advances the efforts made by each Fonds with respect to the promotion of the responsible conduct of research. Through this Policy, the FRQ first wish to assume their responsibility with regards to the sound management and responsible use of public funds, and adopt clear and widely-known procedures by which they can intervene if necessary.

This policy also aims to support and strengthen a culture of ethics within the scientific community. Promoting this culture of ethics within the scientific realm is a responsibility shared by all actors involved

² ALL European Academies. The European Code of Conduct for Research Integrity. European Science Foundation, March 2011.

³ The Singapore Statement on Research Integrity, 2nd World Conference on Research Integrity, 21-24 July 2010, Singapore.

⁴ Council of Canadian Academies Expert Panel on Research Integrity. Honesty, Accountability and Trust: Fostering Research Integrity in Canada. Chapter 5, "Roles and Responsibilities: an Integrated Approach to Research Integrity". Ottawa: CCA, October 2010.

⁵ The Natural Sciences and Engineering Research Council (NSERC), the Canadian Institutes of Health Research (CIHR), and the Social Sciences and Humanities Research Council (SSHRC) Panel on responsible Conduct of Research. The Tri-Agency Framework: Responsible Conduct of Research, 2011. (http://www.rcr.ethics.gc.ca/eng/policy-politique/framework-cadre/).

in research. As they conduct research activities, they must integrate the deontological considerations brought forward in research ethics, as well as professional, environmental, social and legal considerations associated therewith. The FRQ hope that the Policy will lead to an ongoing dialogue on the improvement of best practices in Québec, thereby fostering the achievement of research excellence and maintaining public trust in research.

The Policy:

- describes the underlying values and best practices regarding the responsible conduct of research which Québec's scientific community is being called on to adopt;
- lays down clear expectations on the responsible conduct of research applicable to research activities that benefit from public funding awarded by any of the Fonds de recherche;
- outlines the procedure to be used by institutions to address breach of conduct allegations targeting a research actor from that institution;
- specifies the procedure to be followed by the FRQ in making decisions regarding the responsible use of public funds when faced with substantiated cases of breach of responsible conduct.

2. Terminology

The following definitions are provided only to facilitate the reader's understanding of this Policy, and do not constitute an attempt to define key concepts relating to the activities of the FRQ. For more precise definitions of these concepts, please refer to the Common General Rules of the FRQ.

Awardee: Student or postdoctoral fellow who receives funding from one of the Fonds de recherche du Québec.

Conflict of interest: A conflict of interest may concern an individual (personal conflict) or an institution (institutional conflict). A person or an institution can be considered in a situation of conflict of interest – real or apparent – when their interests conflict with their duties and responsibilities. When in a situation of conflict of interest, this person (or institution)'s objectivity in decision-making may be impaired, at least in appearance, which can raise questions about her integrity. Conflicts of interests include, but are not limited to, financial, political, ideological, or professional interests pertaining to the institution or the individual, his family members, friends, or former, current or prospective professional associates.⁶

Funding: Financial support granted by one of the Fonds de recherche du Québec in the form of a grant, scholarship, or award.

Fund manager: Person employed by an institution to administer research funds entrusted to the institution. The manager's responsibilities may include the verification of expenditures associated with research activities.

⁶ Université de Montréal. Déclaration d'intérêts. http://interets.umontreal.ca/index.html. Prepared by the team of Bryn Williams-Jones, associate professor, Département de médecine sociale et préventive, Université de Montréal.

Infrastructure: Major facility or research centre supported by the Fonds de recherche du Québec through their various funding programs.

Institution: A university, college or university institute that awards graduate diplomas OR an institution having a mandate to conduct research, access to qualified research personnel and research facilities and that is known for its research activities.

Research activities: All steps included in the life cycle of knowledge creation through rigorous methodologies which are—or are in the process of becoming—recognized by peers, spanning from the initial project proposal to the dissemination of results, including applications for research funding and peer review. These steps also include activities related to fund management.

Research ethics: All research activities must be conducted in accordance with a set of ethical standards for research, such as those set out in the Tri-Council Policy Statement⁷, the FRSQ's standards d'éthique⁸ or the FRQNT's Politique d'éthique et d'intégrité scientifique⁹. These standards are primarily concerned with the deontological approach governing the behaviour of researchers, students and research personnel regarding the respect and protection of human participants and animals used in research. In Québec, research ethics boards (REB) and animal protection committees ensure that all research involving human participants or animals (respectively) complies with these ethical standards.

Research integrity: For the purposes of this policy, research integrity will be defined, in the manner of the Council of Canadian Academies Expert Panel on Research Integrity, as "the coherent and consistent application of values and principles essential to encouraging and achieving excellence in the search for, and dissemination of, knowledge. These values include honesty, fairness, trust, accountability, and openness." The term scientific integrity is often used as a synonym to research integrity in the literature.

Research personnel: Person employed by a researcher or an institution to take part in research activities. This person may be a research professional or a support staff for the research activities

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⁷ The Social Sciences and Humanities Research Council, the Natural Sciences and Engineering Research Council, the Canadian Institutes of Health Research. Tri-Council Policy Statement: Ethical Conduct of Research Involving Humans 2, 2014.

⁸ Fonds de la recherche en santé du Québec. Standards du FRSQ sur l'éthique de la recherche et l'intégrité scientifique, 2008, modified in 2009.

⁹ Fonds québécois de la recherche sur la nature et les technologies (FRQNT). Politique d'éthique et d'intégrité scientifique (2010). (http://www.frqnt.gouv.qc.ca/ethique/PDF/Politique Ethique.pdf)

¹⁰ Council of Canadian Academies. Honesty, Accountability and Trust: Fostering Research Integrity in Canada. Chapter 5, "Roles and Responsibilities: an Integrated Approach to Research Integrity". Ottawa: CCA, October 2010, p.38.

being conducted at the institution. Employees may also include postdoctoral fellows or students in certain contexts.

Researcher: Person employed by an institution to carry out research activities. A researcher may be a principal investigator—whose primary duties include directing a research project—or any other researcher who is part of a research team or any other person to whom research privileges have been awarded by the institution, excluding research personnel and students (see respective definitions for these terms).

Respondent: Person against whom an allegation of misconduct is directed.

Responsible conduct of research: The behaviour expected of researchers, students, research personnel and fund managers in the conduct of research activities, in accordance with the criteria specified in the Policy. Section 4 provides a more detailed definition of this term as used within the context of this Policy and its implementation.

Responsible conduct of research officer: Person mandated by the institution to oversee the dissemination and application of the institutional policy on the responsible conduct of research (see section 7.1.2).

Student: A person registered at an institution for the purpose of obtaining a degree, diploma or other academic recognition requiring that she engages in research activities. A student may be a college student, an undergraduate, graduate or postgraduate university student or, in certain contexts, a postdoctoral fellow.

3. Scope of the Policy

The FRQ Policy for the responsible conduct of research applies to both the research activities conducted within a research institution and the internal activities conducted in support of research under the responsibility of the FRQ.

3.1 The FRQ Policy for the Responsible Conduct of Research

This Policy is divided into two major parts. The first part describes the fundamental principles that guide the responsible conduct of research and associated best practices, to which the FRQ subscribe (section 4). The FRQ hope to foster the development of a culture of ethics in research activities in Québec that will go beyond the strict confines of those research activities funded directly by the FRQ. Given researcher mobility and the importance of partnerships in all research activities, this culture must be consistent with national and international trends and reflect their continuous evolution. The FRQ feel that all actors within Québec's research community should be guided by these principles and best practices.

The Policy describes the FRQ's expectations for responsible conduct of research on the part of researchers or students benefitting from FRQ funding. It is also aimed at institutions (including research personnel and fund managers) receiving FRQ research funds, acting as trustee of research funds or hosting FRQ-funded research activities. Notably, it describes breaches to the responsible

conduct of research and responsibilities incumbent to the various actors in research (sections 5 and 6). Researchers and students receiving funds, as well as the research personnel and fund managers must subscribe to responsible conduct in **all** research activities linked to FRQ funding (regardless of where the research is conducted). The same goes for institutions, which must promote and support an environment conducive to the responsible conduct of research by all research actors who undertake research activities therein.

The second part of the Policy (section 7 and beyond) describes the process by which allegations of breach of conduct should be managed and the scope of the FRQ's interventions stemming from its application. These interventions shall focus exclusively on issues involving research activities made possible, in whole or in part (for example, in the case of research funded by FRQ partners), through FRQ funding. When allegations are made concerning research activities with a tangible link to FRQ funding, the institution must comply with the requirements for managing breach of responsible conduct allegations set out by the FRQ. Institutions and individuals funded by the FRQ shall sign a written agreement to this effect.

Note that all research activities conducted in the setting of a FRQ-funded infrastructure are deemed to be linked to the FRQ funding (even if the activity under investigation is not directly funded by the FRQ), because the research activity was made possible through an infrastructure funded by the FRQ. In this context, all research actors (researchers, students, research personnel and fund managers) involved in research activities conducted within the infrastructure funded by the FRQ are subject to the Policy, whether they personally hold or benefit from FRQ funding or not.

3.2 FRQ Internal Rules

Within the Fonds, this Policy has led to the adoption of *Internal Rules for the Application of the Policy on Responsible Conduct of Research to Activities in Support of Research*. These rules echo the dictates of the Policy and set out the procedures for their implementation by each organization. Among other things, they describe the framework by which the Policy can be implemented in relation to the FRQ activities in support of research, including peer review evaluation. The Fonds Internal Rules will be updated independently from the Policy itself (as they do not pertain to institutions). However, their further development shall remain consistent with the Policy.

Part One - The Responsible Conduct of Research

4. The Responsible Conduct of Research

The responsible conduct of research refers to the behaviour expected of the various actors targeted by the Policy in the conduct of research activities. This expected behaviour is based on values such as honesty, reliability and rigour, objectivity¹¹, fairness¹² and independence, justice (especially in recognizing the contributions of others), trust, accountability and benevolence, openness and

¹¹ The FRQ recognize that there is an epistemic pluralism, and that these two values may have different meanings according to discipline or paradigm (e.g., critical theory in the domain of social sciences and humanities).

transparency¹². All actors within the research community (researchers, awardees, research personnel, fund managers, research institutions, funding agencies) must adopt and defend these values while conducting research activities, regardless of their discipline. The common denominator of research in any discipline is the quest for knowledge through peer-recognized (or in the process of becoming so) methodological approach specific to the discipline in question.

The term *responsible conduct of research*¹³, engages the actors (researcher, student, etc.) to reflect on their behaviour while carrying out research activities¹⁴. This term encompasses the notion of scientific integrity (a term more commonly used in this domain), as well as the term research ethics in its deontological sense. This includes the requirements set out by standards on research practices involving human participants or animal subjects. Furthermore, research actors are called upon to adopt best research practices specific to their discipline in order to foster an environment favourable to ethical conduct in their research activities.

In adopting a responsible conduct in research, particular attention must be paid to respect the following essential principles (in no particular order). These principles for the responsible conduct of research are largely informed by the Council of Canadian Academies Expert Panel on Research Integrity report, Honesty, Accountability and Trust: Fostering Research Integrity in Canada¹⁵, to which elements from the European Code of Conduct for Research Integrity¹⁶ and the Singapore Statement on Research Integrity¹⁷ have been added.

¹² Council of Canadian Academies. Honesty, Accountability and Trust: Fostering Research Integrity in Canada. Chapter 5, "Roles and Responsibilities: an Integrated Approach to Research Integrity". Ottawa: CCA, October 2010, p.38.

¹³ In French, the FRQ chose the term "conduite responsable en recherche" instead of "conduite responsable de la recherche", in order to clearly engage the actor to reflect on his behaviour while carrying out research activities.

Sénéchal, Jean-François. Le rôle social du chercheur en science. Exploration des différentes composantes du rôle de chercheur en science à travers l'analyse du discours des chercheurs et du cadre normatif. Dissertation presented to the Faculté des études supérieures et postdoctorales, Université Laval (2012).

¹⁵ Council of Canadian Academies. Honesty, Accountability and Trust: Fostering Research Integrity in Canada. Chapter 5, "Roles and Responsibilities: an Integrated Approach to Research Integrity". Ottawa: CCA, October 2010.

¹⁶ ALL European Academies. The European Code of Conduct for Research Integrity. European Science Foundation, March 2011.

¹⁷ The Singapore Statement on Research Integrity, 2nd World Conference on Research Integrity, 21-24 July 2010, Singapore.

- a) **Conduct research in an honest search for knowledge:** Adopt a fair, open, and reliable approach in research or research-creation, as well as in all activities that support, fund, or otherwise encourage research.
- b) Foster an environment of research integrity, accountability and public trust: Individuals and organizations at all levels must take responsibility for creating, implementing, maintaining, and complying with policies and practices designed to ensure accountability and the maintenance of public trust.
- c) Maintain an appropriate level of knowledge and expertise, and act accordingly: Research activities must be conducted according to a rigorous methodology which is—or is in the process of becoming—recognized by peers. This methodology should be designed in a manner that avoids negligence and inattention. Research actors must thus continuously invest in knowledge development.
- d) **Review the work of others with integrity:** Individuals and organizations should ensure the peer review process is conducted in a manner that reflects the highest scholarly, professional, and scientific standards of fairness and confidentiality. The same standards must apply to the evaluation itself.
- e) Avoid conflicts of interest, or if they cannot be avoided, address them in an ethical manner: Personal and institutional conflicts of interest, or the appearance of conflict of interest, should be avoided. When unavoidable, each instance must be identified, disclosed, carefully examined, and managed in such a way as to avoid any corruption of the research process.
- f) Be transparent and honest in applying for and managing public funds: Applicants must provide complete and accurate information as required for a true and transparent evaluation of their funding application. They must ensure that collaborators listed on the application have agreed to be included.
- g) Use research funds and resources responsibly and provide accountability: Individuals and organizations at all levels should ensure the responsible allocation and management of research funds in accordance with sound academic and financial principles. This includes ensuring an efficient use of resources.
- h) Report on research in a responsible and timely fashion: Results should be published in a transparent, just and diligent manner. Publications, including clear statements of data and methodology, as well as research activities and research results, should not be unduly delayed or intentionally withheld. These considerations should be configured within each discipline's own timeframe.
- i) Treat data with scholarly rigour: Ensure the highest levels of exactitude in proposing, performing, recording, analyzing, interpreting, reporting, publishing, and archiving research data and findings. The appropriate authorities, as mandated by applicable standards or regulations, should retain a copy of research records. For example, these data should be accessible to allow validation of published findings.
- j) Acknowledge all contributors and contributions in research: All contributors and contributions to research and research results, including financial contributions, must be acknowledged fairly and accurately whenever research is communicated. The list of authors must include all those and only those who meet applicable authorship criteria for a given discipline; other contributions should be acknowledged (such as technical services, financial backers or sponsors). In addition, appropriate references must be provided and permissions obtained for the use of published or unpublished works, including data, methods, results, or original manuscripts.
- k) Treat all research participants fairly and with respect and consider the environmental impact of research: Research participants must be treated with justice, respect and benevolence, in

accordance with the basic principles of research ethics. For example, protecting the confidentiality of data collected from participants is essential. Research activities must be conducted in accordance with relevant regulations in animal care and use. Impacts on the environment should also be considered when conducting research. Relevant regulations and applicable policies of the Tri-council agencies, the Fonds and the institutions concerned should be followed, guided by common principles and values.

- Define the responsibilities of partners in the responsible conduct of research: Collaborating partners must specify their respective responsibilities at the outset of the research activities conducted or funded in partnership in a manner that fosters the responsible conduct of research, and must decide on the procedures for managing any allegations of misconduct.¹⁸ In the case of projects that involve international collaborations, it could be useful to develop tools for the establishment of agreements on the management of breach of responsible conduct of research allegations¹⁹;
- m) Promote the responsible conduct of research and Remain up to date with the development of best practices: Research actors must maintain and update their research practices in accordance with the principles and best practices guiding the responsible conduct of research. Researchers must contribute to training future generations of researchers, students and research personnel, particularly the research teams under their supervision. Institutions hosting research actors are responsible for providing an environment favourable to the development of a culture of responsible conduct of research. Together, researchers and institutions are responsible to provide their community with access to the relevant information, mentorship and support needed to acquire these skills. An individual's level of responsibility should be commensurate with his competence and experience.

5. Shared responsibilities in the Responsible Conduct of Research

5.1 Responsibilities of Researchers, Students, Research personnel and Fund managers in their Research Activities

Researchers, students, research personnel and fund managers must adopt a responsible conduct in all their research activities. To that end, the onus is on them to:

5.1.1 remain up to date with the principles and best practices for responsible conduct of research, integrate these into their research activities and promote them within their working groups;

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¹⁸ Montreal Statement on Research Integrity in Cross-Boundary Research Collaborations. 3rd World Conference on Research Integrity, Montréal, May 2013.

¹⁹ Organisation for Economic Co-operation and Development (OECD). Report from the workshop on Best practices for ensuring scientific integrity and preventing misconduct. OECD Global Science Forum (2007). (http://www.oecd.org/sti/sci-tech/40188303.pdf)

- 5.1.2 keep watch and continually reflect on their research activities to ensure they adopt a responsible conduct of research and comply with all applicable policies, regulations and laws:
- 5.1.3 ensure the responsible and ethical use of public funds;
- 5.1.4 cooperate fully in any procedure undertaken to manage allegations of breach of responsible conduct of research that target current or past research activities with which they are associated (including keeping and making available all documentation relevant to the preliminary evaluation and complaint's review);
- 5.1.5 be proactive in remedying any breach of responsible conduct of research and be honest and consistent concerning the conclusions of the complaint's review.

5.2 Responsibilities of Institutions

Institutions holding or administering FRQ funding *or* hosting researchers or students involved in research activities have the responsibility to:

- 5.2.1 promote an environment conducive to the adoption of responsible conduct of research in accordance with best practices, and increase awareness of the importance of the responsible conduct of research through continuous education among the institution's research community, particularly its employees;
- 5.2.2 adopt a policy for the responsible conduct of research coherent with the FRQ Policy that covers all research activities conducted on site or by the institution's employees, whatever the source of funding²⁰;
- 5.2.3 ensure the responsible and ethical management of public funds;
- 5.2.4 manage allegations of breach of responsible conduct of research involving their researchers, students or research personnel as prescribed by their institutional policy and in accordance with known principles of procedural fairness and natural justice²¹ (including appropriate documentation);
- 5.2.5 follow up as needed to reduce any adverse consequences of an allegation or breakoff responsible conduct of research, paying particular attention to the protection of whistleblowers and vulnerable persons.

5.3 Responsibilities of the FRQ

The FRQ are committed to ensuring that all actors within Québec's research community are aware of the importance of adopting a responsible conduct in their research activities and to supporting them in their efforts to achieve that goal. Moreover, the FRQ shall also ensure the adoption of responsible conduct in their own activities. The FRQ shall therefore:

²⁰ Alternatively, centres, affiliated institutes and other institutions may choose to implement the policy of an institution with which they already have an affiliation agreement or agreement confirming the implementation of the designated institution's policy.

In the presence of an agreement stipulating that the policy in effect is that of another institution, the latter must grant full authority for the management of breach of conduct allegations to the institution in question.

- 5.3.1 issue clear directives regarding the FRQ's expectations for the responsible conduct of research;
- 5.3.2 develop an internal policy for the responsible conduct of research including mechanisms for allegation management consistent with the requirements stipulated for institutions, and procedures for intervening where necessary;
- 5.3.3 ensure that FRQ-funded researchers, students and institutions use the public funds awarded to them in a responsible and ethical manner;
- 5.3.4 contribute to the ongoing dialogue on responsible conduct of research with the scientific community, that can help shape training and awareness initiatives within institutions.

6. Defining Breaches of Responsible Conduct of Research

For the sake of facilitating the Policy's implementation by institutions, the FRQ subscribe, in general, to the definitions of breach of research integrity provided in the Tri-Agency Framework: Responsible Conduct of Research²². The FRQ have reservations concerning those definitions that do not take into account the intentionality of the breach (e.g. intent to deceive or mislead the scientific community)²³. In this regard, the FRQ would like to specify that the notion of intent, when demonstrable, may prove relevant to the assessment of breach of responsible conduct allegations.

Note: This sub-section has been taken from the Tri-Agency Framework: the Responsible Conduct of Research²⁴, effective as of December 5, 2011.

6.1 Breaches of research integrity are defined as follows:

- *Fabrication*: Making up data, source material, methodologies or findings, including graphs and images.
- 6.1.2 **Falsification:** Manipulating, changing, or omitting data, source material, methodologies or findings, including graphs and images, without acknowledgement and which results in inaccurate findings or conclusions.

²² CANADIAN INSTITUTE IN HEALTH RESEARCH, NATIONAL SCIENCES AND ENGINEERING RESEARCH COUNCIL, SOCIAL SCIENCES AND HUMANITIES RESEARCH COUNCIL. Tri-Agency Framework: Responsible Conduct of Research, 2011. For the sake of consistency and simplicity for the research community, the FRQ chose to adopt the definitions proposed by the Tri-Agency framework to describe breaches of responsible conduct of research.

²³ Honest error is not considered to be research misconduct by the literature on which the FRQ have based their definition of responsible conduct of research (section 4). The FRQ consider that alleged allegations may be the result of honest error when the person involved by the allegation can demonstrate that she acted in a reasonable manner under the circumstances, and that the alleged facts result from an actual good faith error. Honest errors should be recorded by institutions in order to detect their recurrence, without necessarily conclude to research misconduct. In the case of recurrent honest errors, the institution should conclude to negligence or incompetence, which in themselves constitute breaches of responsible conduct of research..

²⁴ Op. cit, note 21, p.13

- 6.1.3 **Destruction of research records:** The destruction of one's own or another's research data or records to specifically avoid the detection of wrongdoing or in contravention of the applicable funding agreement, institutional policy and/or laws, regulations and professional or disciplinary standards.
- 6.1.4 **Plagiarism:** Presenting and using another's published or unpublished work, including theories, concepts, data, source material, methodologies or findings, including graphs and images, as one's own, without appropriate referencing and, if required, without permission.
- 6.1.5 **Redundant publications:** The re-publication of one's own previously published work or part thereof, or data, in the same or another language, without adequate acknowledgment of the source, or justification.
- 6.1.6 **Invalid authorship:** Inaccurate attribution of authorship, including attribution of authorship to persons other than those who have contributed sufficiently to take responsibility for the intellectual content, or agreeing to be listed as author to a publication for which one made little or no material contribution.
- 6.1.7 **Inadequate acknowledgement:** Failure to appropriately recognize contributions of others in a manner consistent with their respective contributions and authorship policies of relevant publications. **Inadequate acknowledgement also includes failure to mention the source of funding of the research activities, as required by the funding agencies.**
- 6.1.8 **Mismanagement of conflict of interest:** Failure to appropriately manage any real, potential or perceived conflict of interest, in accordance with the Institution's policy on conflict of interest in research, preventing one or more of the objectives of this Policy from being met.

Note: with the exception of the passages in italics, the following sub-section is taken from the Tri-Agency Framework: the Responsible Conduct of Research, effective as of December 5, 2011.

6.2 Moreover, the following constitute breaches of responsible conduct of research:

- 6.2.1 <u>Misrepresentation in an Agency Application or Related Document.</u>
 - a) Providing incomplete, inaccurate or false information in a grant or award application or related document, such as a letter of support or a progress report.
 - b) Applying for and/or holding a *FRQ* award when deemed ineligible by the *FRQNT*, *FRQS*, *FRQSC* or any other research or research funding organization world-wide for reasons of breach of responsible conduct of research policies such as ethics, integrity or financial management policies.
 - c) Listing of co-applicants, collaborators or partners without their agreement.

6.2.2 Mismanagement of Grants or Award Funds.

a) Using grant or award funds for purposes inconsistent with the policies of the FRQ; misappropriating grants and award funds; contravening FRQ financial policies²⁵; destroying relevant documents in an untimely manner or providing incomplete, inaccurate or false information on documentation for expenditures from grant or award accounts.

6.2.3 Breaches of Policies or Requirements for Certain Types of Research.

Failing to meet Agency policy requirements or to comply with relevant policies, laws or regulations providing clear and compulsory directives for the conduct of certain types of research activities; failing to obtain appropriate approvals, permits or certifications before conducting these activities; failing to respect confidentiality agreements. These may relate to applicable legal provisions, such as the Civil Code of Québec, or recognized standards and regulations such as those for the protection of animals, laboratory biosafety, environmental standards and codes of professional conduct. In the case of research activities conducted outside Québec, all local laws and regulations must be respected within the Canadian institution and abroad where research activities are conducted, local norms must also be considered.

6.2.4 <u>Infringement of the Integrity of a Scientific Peer Review Process and the Awarding of</u> Funding.

Collusion; failure to appropriately manage conflict of interest; appropriating the work of another following FRQ committee evaluation; or failure to respect confidentiality.

6.2.5 Make <u>False or Misleading Allegations</u>.

Making malicious or knowingly false allegations of research misconduct.

Part Two - Managing the Responsible Conduct of Research

7. Managing Breaches of Responsible Conduct of Research - Institutions

Institutions are responsible for developing procedures for addressing breach of responsible conduct of research allegations that respect standard principles of fairness and justice. The process for managing such allegations must be reliable, complete and rigorous. It must comply with applicable laws and the principles of natural justice and be carried out with diligence.

Institutions play a leading role in promoting and ensuring the responsible conduct of research; it is also their responsibility to manage allegations of breach of responsible conduct of research. The FRQ will not

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²⁵ Pursuant to the Common General Rules of the Fonds, the FRQ reserve the right to carry out financial audits of the institutions at any time, on a routine or targeted basis.

re-examine a claim that has already been reviewed by an institution. They must be able to depend entirely on the institution's findings to arrive at their own decisions regarding allegations of breach of responsible conduct of research linked to the funding they provide. This is why the FRQ set the basic parameters of the process in this Policy. Failure of the institution to carry out this process in accordance with the requirements constitutes a breach of the institution's responsibilities under the Policy. The FRQ reserve the right to request corrective measures, or to impose sanctions on the institution, if necessary.

7.1 Governance

7.1.1 <u>Institutional Policy Concerning the Responsible Conduct of Research</u>

Any institution receiving funding from the FRQ, acting as trustee of such funding, or hosting FRQ awardees (in Québec), shall adopt a policy that meets the FRQ requirements set out in this Policy, and shall update the policy regularly in keeping with the evolution of best practices.²⁶

7.1.2 Responsible Conduct of Research Officer

Institutions designate a Responsible Conduct of Research Officer who shall oversee implementation of their policy. This Officer must be a senior administrator with a sufficient level of independence and decision-making autonomy, namely to appropriately address any conflicts of interest associated with the management of allegations of breach of responsible conduct of research.

The designated Officer oversees that a culture of responsible conduct of research is promoted within the institution, notably through education for its community. This person is also responsible for monitoring the process by which allegations of breach of responsible conduct of research are managed. She is the main institutional contact for the FRQ.

The institution must ensure that the identity and contact information of the Officer are widely known throughout the community so that individuals will know who to contact when faced with a doubt about a conduct of research issue.

7.1.3 Confidentiality

The institution and anyone involved in the allegation management process have the responsibility to protect the confidentiality of sensitive information concerning all parties involved, in accordance with applicable laws. The communication of personal information is limited to that which is strictly necessary to ensure proper management of the allegation, and to the smallest number of people possible.

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Award holders registered only at a research institution outside Québec are subject to the FRQ Policy for the Responsible Conduct of Research. The FRQ may contact the host institution or carry out any necessary verification to ensure proper management of public funds.

7.1.4 Persons Involved in the Management of Allegations

The persons involved at all stages of the management of allegations of breach of responsible conduct of research shall agree to:

- a) demonstrate the highest standards of transparency in any situation of conflict of interest, real or apparent, and to manage these situations appropriately;
- b) be impartial;
- c) show discretion and respect the confidentiality of sensitive information;
- d) comply with the principles of procedural fairness and natural justice when managing a breach of responsible conduct of research allegation. If pertinent, they will seek legal advice.

7.2 Allegation Management Process

Institution policy dictates the process for managing allegations of breach of responsible conduct of research. However, this process must meet the requirements set out below when the research activities in question are supported by funding from the FRQ.

7.2.1 Receiving Allegations

The Responsible Conduct of Research Officer shall receive all allegations and is responsible for carrying out a preliminary assessment of the complaint's admissibility²⁷. Institution policy dictates when and under what circumstances anonymous allegations will be considered by the institution.

7.2.2 Preliminary Assessment of Admissibility

Institutions shall assess the admissibility of every allegation they receive, whether it be a formal complaint or a simple internal notification. At this stage, the Responsible Conduct of Research Officer shall:

- a) appoint a minimum of one person occupying a senior administrative position at the institution who meets the criteria set out in section 7.1.4, to assist in the assessment of the complaint's admissibility;
- b) render a decision concerning the admissibility of a complaint;
- c) transmit a letter indicating the decision made regarding the allegation's admissibility to the Director of Ethical and Legal Affairs at the FRQ, within two months of receiving the complaint. This letter must be devoid of personal information allowing identifying the concerned parties;

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²⁷ The procedures for the retention/destruction of information relating to allegations received are determined by the institution. However, the FRQ stress that the creation of an institutional registry is part of good practices in the management of allegations and may allow tracking recurrent breaches or better orient education efforts within the institution.

- d) inform the FRQ forthwith if the situation requires immediate intervention on the part of the institution (for example, to protect research participants, ensure the safety of laboratory animals or limit harm to the environment). The Fonds concerned will then contact the institution to determine whether immediate intervention by the FRQ is also required. In this case it will be necessary to communicate the identity of the respondent to the FRQ (notwithstanding the statement in paragraph c) above);
- e) if this has not already been done, inform the respondent of the process underway, if applicable²⁸.

7.2.3 Reviewing Allegations

a) Process

If the complaint is deemed admissible, the Responsible Conduct of Research Officer shall:

 convene a complaint review committee; following the review of the complaint, relay the findings to the FRQ, as described in the section on reporting information to the FRQ (section 8.2 or 8.3 below).

The institution proceeds to review all allegations of misconduct deemed admissible. Once the institution has accepted a complaint, it may not be retracted.

Notwithstanding the section above, if, after having heard the respondent, facts are clear (i.e. the respondent acknowledges the facts or further examination into the complaint would not uncover any new information pertinent to the allegation), the Responsible Conduct Officer may decide to render a decision without convening a review committee. In these exceptional cases, further to the admissibility assessment, the Officer, together with the persons appointed as mentioned above (section 7.2.2 a), shall produce a report for the FRQ. This report must be prepared in accordance with the requirements stipulated for complaint review reports in section 8.3, adapting the report as necessary (i.e. items (c) and (d) may be overlooked). Considering this constitutes an accelerated process, the report must be provided within 60 working days following the transmission of the letter of admissibility to the FRQ. The letter of admissibility must demonstrate that an accelerated process is sufficient for managing the allegation to the satisfaction of the FRQ.

Best practices in examining allegations of breach of responsible conduct include the right to be heard, for all parties involved (complainant and respondent), and the right to appeal. Institutions should make the relevant clarifications in their institutional policies. Furthermore, concerned individuals (complainants, respondents or witnesses) must not undergo either persuasive or dissuasive pressure during the review process.

b) Review Committee.

The review committee shall be comprised of individuals who collectively have the necessary expertise to arrive at an informed decision regarding the allegation. Said committee must include:

- one member from outside the institution. This number may be higher when justified by the size of the committee, in view of maintaining appropriate proportionality. External members must be free of any conflict of interest while examining a complaint²⁹; i.e. they must have no affiliation with the alleged facts, the department in which the alleged facts occurred or the parties involved in the allegation (complainant or respondent);
- an expert from the research discipline of the respondent, or of comparable professional competence, thereby considered to be a peer. This person must have sufficient technical or methodological expertise to properly assess the case or that is pertinent to the nature of the allegation. In cases where the respondent is a student, the expert member may be another student.

The complaint review committee must have access to and the ability to analyze all available information relating to the complaint. It may request further details from the institution in order to validate the information provided. The committee may be guided by an individual with expertise regarding compliance with, and integrity of, the process. It may also call on ad hoc experts if required for a proper understanding of the situation.

c) Timelines

The institution's Responsible Conduct of Research Officer must transmit a letter (for non founded allegations) or a report (for founded allegations) within five months following the transmission of the letter of admissibility. The letter or report transmitted to the FRQ must meet the minimum reporting requirements described in section 8.2 and 8.3 respectively.

Timelines required for processing an allegation, which include a maximum of two months for the assessment of admissibility and a maximum of five months for the complaint's examination, may be extended for a reasonable period if it proves impossible to complete the entire process within the prescribed time. This may be the case, for example, if the management process or the review committee's conclusions are under appeal. Institutions must advise the FRQ in writing of any reasons for which the complaint's review cannot be completed within the prescribed time. The FRQ shall be regularly informed as to the progress of the allegation management process.

²⁹ Conflict of interest is likely to discredit the process and harm the reputation of the individuals and institutions involved. It is therefore essential that the risk of conflict of interest be properly assessed and any situation be dealt with appropriately. On a similar note, a person having recently left the institution where the investigation is taking place may easily find himself in a conflict of interest situation.

7.2.4 Interventions – Sanctions

Many factors must be taken into account in determining just sanctions, including the intentionality of the breach of responsible conduct of research, its severity and impact, the context in which the breach occurred or its repetitive nature. The institution may impose measures aimed at increasing relevant training for research actors, repairing harm caused or correcting the scientific record, if applicable.

Under all circumstances, research actors shall undertake every effort to remedy prejudice caused to the parties involved in the allegation management process and to clear the name of the respondent of an allegation which proved unfounded upon review. Institutions have the responsibility to carry out any necessary follow-up in this regard.

Institutions shall also be sensitive to the impacts that result from the application of an intervention or sanctions on vulnerable individuals not directly involved in the breach. Institutions may choose procedures or measures aimed at minimizing the negative consequences wherever possible.

8. Reporting Information to the FRQ

Allegations concerning research activities to which FRQ funding is tied (see section 3, 'Scope of the Policy') must be taken up and reported by the institution according to the measures described herein. The institution's Responsible Conduct of Research Officer shall report to the FRQ, within timelines described in section 7.2.2 and 7.2.3, according to the parameters defined below.

8.1 Letter of Admissibility

Once the preliminary assessment of admissibility has been completed, the institution shall send a letter to the FRQ containing no personal information by which to identify the respondent or the complainant³⁰ and indicating:

- a) the unique file identification number;
- b) the nature of the allegation, based on the categories in section 6;
- c) the date the complaint was received;
- d) the status of the parties involved in the complaint (researcher, student, research personnel, fund manager, participant in a research project, REB, etc.);
- e) the need for immediate intervention, if appropriate (to avoid harm, risk to participants, etc.);
- f) the admissibility of the allegation and the initiation of a complaint's review <u>or</u> the inadmissibility of the allegation and the grounds for dismissing the complaint;
- g) the complaint review committee composition, if necessary;

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 $^{^{30}}$ A sample letter of admissibility for the use of institutions is provided in Appendix 1.

h) the justifications for adopting an accelerated process to review the complaint (7.2.3.a) and its appropriateness under the circumstances, when applicable.

The institution shall retain the unique file number transmitted to the FRQ at least until every step of the process has been completed (including any possible appeal process).

8.2 Letter of Findings Following the Complaint's Review in the Case of Unfounded Allegations

At the conclusion of a complaint's review that finds that **no breach** of responsible conduct has occurred, the institution shall send a letter to the FRQ indicating:

- a) the unique file identification number (8.1.a);
- the names of the committee members and their area of expertise, justifying their appointment and allowing validation of the adequacy of the committee (expertise, function or status);
- c) the timeline of the process as well as any feature demonstrating that the internal process as prescribed by the institutional policy was followed;
- d) the findings following the complaint's review, specifying the grounds for dismissal of the allegation.

The FRQ shall then consider the matter closed (without learning the identity of the respondent). However, the FRQ reserve the right to request further details from the institution within a period of 60 clear days.

8.3 Final Report Following the Complaint's Review in the Case of Substantiated Allegations

At the conclusion of a complaint's review that confirms a breach of responsible conduct of research, the Fonds to which funding is tied must be informed forthwith. The institution shall transmit a full copy of the committee's report to the Director of Ethical and Legal Affairs at the FRQ and inform the FRQ-funded researcher, awardee, research personnel or fund manager of this communication. The FRQ shall be apprised of the identity of the respondents involved in the matter.

A full and complete report shall be relayed to the FRQ specifying:

- a) the unique file identification number (8.1.a);
- b) the name of the respondent;
- the names of the committee members and their area of expertise, justifying their appointment and allowing validation of the adequacy of the committee (expertise, function or status);
- d) the timeline of the process as well as any feature demonstrating that the internal process as prescribed by the institutional policy was followed;
- e) any interventions requested by the institution pending the conclusion of the complaint's review;
- f) any comments expressed by the respondent;
- g) any comments expressed by the complainant;

- h) the findings following the complaint's review, clearly stating that a breach of responsible conduct did occur;
- i) an assessment of the impact of the breach, if applicable, making it possible to judge its seriousness. This assessment could include impacts on:
 - research participants, animals or the environment;
 - scientific knowledge in the discipline in question;
 - the research team, students, colleagues, partners and institutions;
 - public trust in the scientific research activity or the scientific community;
 - the credibility of Québec's scientific community.
- recommendations (or a final decision, as per institutional policy) for sanctions and actions aimed at remedying any harm caused or correcting the scientific record, if appropriate.

If the institution does not produce a final report, if the timeline is extended unreasonably, if there was a procedural flaw in regards to FRQ requirements or institutional policy, or if the report appears unsatisfactory on the face of it, the FRQ shall request further details. Ultimately, the FRQ could ask the institution to proceed according to specifications, and reserve the right to take measures aimed at inciting the institution to correct the situation and see the process through.

9. Managing Breaches of Responsible Conduct of Research – FRQ31

The FRQ subscribe to the same rules for managing allegations of breach of responsible conduct as those specified for institutions, with adjustments as necessary. As mentioned above, the FRQ have adopted Internal Rules allowing them to define the procedures in place and factors specific to the operations of the FRQ. The Fonds treat allegations with diligence and with due regard to the rights and dignity of all parties involved.

9.1 The FRQ Responsible Conduct of Research Committee

9.1.1 Mandate

The FRQ are setting up a *Responsible Conduct of Research Committee* (RCRC), a permanent committee made up of independent members from the Fonds. The committee's mandate is to:

- a) monitor the Policy's progress and implementation within institutions and the Fonds and any challenges arising therefrom, and relay this information to the scientific Directors of the Fonds;
- b) bring forward recommendations on the further development of the Policy, where applicable;

³¹ Fonds de recherche personnel are required to subscribe to the principles of responsible conduct dictated by the regulations in the code of ethics of their employer Fonds.

- c) review reports of substantiated breaches of responsible conduct and make recommendations on the actions required by the scientific Directors of the Fonds involved:
- d) examine admissible allegations tied to the internal activities of the Fonds, and make recommendations to the scientific Directors of the Fonds involved;
- e) report on their activities annually to the Board of Directors of the Fonds.

9.1.2 <u>Composition</u>

The FRQ Responsible Conduct of Research Committee shall include:

- a chairperson (who is not a member of the FRQ personnel, is from the academic sector
 whether active or retired or has expertise in the responsible conduct of research):
- b) a vice-chairperson who meets the same criteria as the chairperson;
- c) at least three members from the scientific community who collectively represent the scientific community of each Fonds, albeit without holding positions of administrative or scientific responsibility at the FRQ (ideally, active or senior researchers in positions not likely to place them in any conflict of interest).
- d) a student member;
- e) the FRQ Director of Ethics and Legal Affairs, acting as secretary without the right to vote.

The FRQ committee must also include at least one person knowledgeable in scientific integrity or responsible conduct of research.

The committee members shall be appointed by the three Boards of Directors of the Fonds de recherche Santé, Société et culture and Nature et technologies. Members may not be dismissed unless at least two of the three Boards of Directors approve such dismissal. The Chief Scientist of Québec, acting as chair of the Boards of Directors of the Fonds de recherche, shall designate the chairperson of the RCRC for a three-year mandate. Substitute members may be appointed. Members of the RCRC are appointed for a three-year renewable mandate.

9.2 Management Process for Substantiated Cases of Breach of Responsible Conduct of Research

9.2.1 Management

The scientific Director of the Fonds involved shall entrust the management of cases of breach of responsible conduct of research to the Director of Ethical and Legal Affairs.

Complainants who submit an allegations of breach of responsible conduct directly to the FRQ Director of Ethical and Legal Affairs shall be directed to the institution competent for managing it. In the case of anonymous allegations, the FRQ Director of Ethical and Legal Affairs shall transfer the information obtained to the institution in question, which will receive the allegation in accordance with the institution's policy. However, if immediate intervention is required on the part of the Fonds (for example, revocation or suspension of funding) the FRQ

shall act forthwith and shall then inform the institution. The Fonds may also, under their own initiative, formulate allegations of breach of conduct and submit them to the institution.

If an allegation involves research activities conducted at the FRQ, the matter will be managed in accordance with the FRQ's Internal Rules for the responsible conduct of research.

When the FRQ receive a report for a substantiated case of breach of responsible conduct from an institution, the Director of Ethical and Legal Affairs shall:

- a) prepare and relay the information necessary for the examination of the complaint's review report by the Responsible Conduct of Research Committee;
- b) convene the RCRC committee at the earliest opportunity;
- c) inform the scientific Director of the Fonds involved and the respondent of the initiation of the examination of the complaint's review report.

9.2.2 Quorum

In order for the RCRC to examine an institution's report for a substantiated case of breach of responsible conduct and submit recommendations, a quorum is required, consisting of:

- a) the chairperson or vice-chairperson;
- b) two members of the permanent committee, with competencies relevant for the research field in question if possible;
- c) a student member, if the case involves a student (complainant or respondent).

If necessary, the committee may appoint an expert member with relevant expertise. If need be, the committee may also consult any other person it deems useful that could provide insight and help guide its deliberations (for example, the chairperson of the committee that conducted the complaint's review at the institution). In the case of a tie, the committee chairperson—or vice-chairperson acting as chairperson—shall have the deciding vote.

9.2.3 Examination of the Report and Recommendations

The committee shall examine the institution's final report on the complaint's review. It shall then:

- a) confirm the presence of a tangible link to FRQ funding, thereby granting jurisdiction of the file to the FRQ in accordance with section 3.1;
- b) examine the report and verify whether it complies with the requirements stipulated in section 8.3; (However, it does not redo the complaint's review and does not constitute an appeal panel for decisions made by institutions);
- c) submit recommendations to the scientific Director of the Fonds involved concerning sanctions that could be imposed by the FRQ, taking into account the assessment of the severity of the breach of conduct in light of the impacts indicated in the report.

9.2.4 Decision and sanctions

Final decisions pertaining to sanctions or corrective measures are under the jurisdiction of the scientific Director of the Fonds involved. These sanctions or measures take into account the intentionality, severity, consequences (including impact on vulnerable persons involved in the process), repetitive nature and context of the breach of conduct, as reported by the findings of the complaint's review conducted by the institution's committee.³².

The interventions of the FRQ are independent from those taken by the institution and relate exclusively to issues of funding and eligibility for FRQ competitions. The measures that may be taken by the Fonds include to:

- a) require an upgrade of skills in responsible conduct of research, or make supplemental training an eligibility requirement for FRQ funding;
- b) revoke or suspend funding, request a reimbursement of funds, or render the party ineligible to receive FRQ funding for a given period of time;
- c) render a party ineligible to apply for FRQ funding or prohibit the party from sitting on FRQ evaluation committees for a given period of time;
- d) withdraw FRQ recognition from an institution or infrastructure³³, or require a research network to exclude a respondent in a substantiated case of breach from all activities supported by the Fonds, or oblige a network director to step aside in favour of another researcher from the network if he has been implicated in a substantiated case of breach of responsible conduct of research;
- e) file a complaint pursuant to the legal provisions in Sections 61 and 62 of the Act Respecting the Ministère de l'Enseignement Supérieur, de la Recherche, de la Science et de la Technologie (CQLR, c. M-15.1.0.1) or seek any other applicable legal recourse;
- f) any other measures available to the FRQ and deemed appropriate in the circumstances.

When applying interventions or sanctions, the FRQ shall be sensitive to their impact on whistleblowers and vulnerable individuals not directly involved in the breach. For example, the FRQ may choose procedures aimed at minimizing the negative consequences on these parties wherever possible.

9.3 Handling of Information by the FRQ

The management of information relating to breaches of responsible conduct of research falls under the responsibility of Director of the Ethical and legal Affairs Office of the Fonds. Such information is

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³² However, unintentional mistakes are not the same as repeat errors, which may constitute negligence. Negligence is itself a breach of responsible conduct and is subject to interventions or sanctions by the FRQ.

³³ For example, if a case of improper management of funds involves a manager or funding administrator, the FRQ may impose sanctions on his employer institution.

handled in accordance with the *Act respecting Access to Documents Held by Public Bodies and the Protection of Personal Information*.

The procedures for maintaining files relating to breach of responsible conduct of research are different from those used for application or recipient files (limited period of retention, restricted access, etc.). Retention periods for these records are specified in the retention schedule of the Fonds involved. Aggregate statistics may be collected and made public.

In the interest of sound management of public funds, researchers or awardees receiving funding from a Fonds agree that information concerning any sanctions imposed on them by the FRQ be made accessible to the three Fonds de recherche du Québec, if necessary. Moreover, they agree that their home institution at the time of sanction be informed. The fact of being ineligible for one Fonds de recherche will thus have a direct impact on an applicant's eligibility for the three Fonds de recherche.

9.4 Policy enforcement

The Policy is made public starting September 2014. Institutions have a one year period of transition to comply. The Policy comes into force September 1st 2015. However, the FRQ will manage substantiated cases of breach of responsible conduct of research in the spirit of the principals set forth in the Policy January 2015.

The FRQ shall update this Policy at the latest three years after its coming into effect and at least every five years following that.

ACKNOWLEDGEMENTS

To ensure greater consistency for the sake of Québec's research community, the FRQ Policy on the Responsible Conduct of Research is largely inspired by the Panel on Responsible Conduct of Research from the CIHR, NSERC and SSHRC's Tri-Agency Framework: Responsible Conduct of Research (2011). The FRQ want to render thanks to the Secretariat on the responsible conduct of research for their collaboration.

While in the process of elaborating the Policy, the FRQ consulted Vice-Presidents of Research, researchers, student and professional associations, unions, fund managers, directors of research centers or research networks to discuss the challenges associated with the responsible conduct of research. The FRQ would like to thank all of those who contributed. The FRQ also wish to acknowledge the Direction de l'éthique et de la qualité du ministère de la Santé et des Services sociaux, as well as of the Commission de l'éthique en science et en technologie. Others had the opportunity to express their views through our public consultation in the fall of 2013.

Lastly, this Policy is the product of significant work within the FRQ conducted under the supervision of the Chief Scientist and the Director of Ethical and Legal Affairs. In particular the FRQ wish to underscore the significant contribution made by the members of the Ethics and Scientific Integrity committees (statutory sub-committees of the Board of Directors) of the Fonds de recherche Santé, Société et culture and Nature et technologies in drawing up and writing the Policy, as well as the contribution from consulted experts and employees who took part in the Policy elaboration process.

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