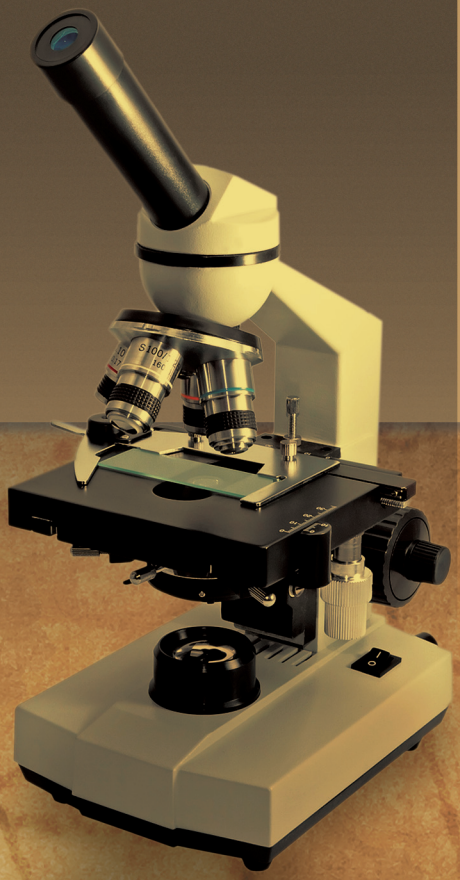
Canadian Food Inspection Agency
Agence canadienne d'inspection des aliments

# POLICY ON THE RESPONSIBLE CONDUCT OF RESEARCH AND DEVELOPMENT



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# Introduction:

The Canadian Food Inspection Agency (CFIA) *Policy on the Responsible Conduct of Research and Development* outlines the criteria and guiding principles for conducting research and development at, or on behalf of, the CFIA. It provides an explicitly stated ethical framework within which all research and development should be conducted in, or for, the CFIA and it forms an integral part of the Agency's *Values and Ethics Strategy: A Framework for Ethical Decision Making*.

The Policy is guided by the CFIA's Code of Conduct and by the following CFIA Statement of Values:

- We value scientific rigour and professional and technical competence. These play a crucial role in our decision making. We do not manipulate science to achieve a desired outcome but acknowledge that other factors must be taken into account in this decision making.
- The reputation and credibility of the Agency are vital to our ability to deliver our mandate. As such, we behave, internally and externally, in a way that trust is preserved.
- We are proud of the contributions we make to the quality of life of Canadians. We value dedication and responsiveness from all employees day to day and, particularly, during an emergency.
- We value competent, qualified and motivated personnel, whose efforts drive the results of the Agency.

The Policy is also guided by the *Values and Ethics Code of the Public Service*, which sets out the core values and ethics that must guide public servants in all their professional activities. The core values of this code are as follows:

- **Democratic Values:** Helping Ministers, under law, to serve the public interest.
- **Professional Values:** Serving with competence, excellence, efficiency, objectivity and impartiality.
- **Ethical Values:** Acting at all times in such a way as to uphold public trust.
- **People Values:** Demonstrating respect, fairness and courtesy in dealings with both citizens and fellow public servants.

This policy is consistent with the statement from the Tri-Council (Canadian Institutes of Health Research, the Natural Sciences and Engineering Research Council, and the Social Sciences and Humanities Research Council), titled *Tri-Council Policy Statement: Integrity in Research and Scholarship*. It follows closely the recommendations of the United States Department of Health and Human Services Office of Research Integrity *ORI Introduction to the Responsible Conduct of Research* (2006), and the *Australian Code for the Responsible Conduct of Research* (2007).

This policy recognizes the importance of the role that the CFIA plays as a federal regulator. All CFIA employees, including those involved in research and development, understand that their actions can have a serious impact on human, animal and plant health; on the Canadian economy and trade; and on the environment. Therefore, they understand that they must respect the decisions of the CFIA with respect to the disposition of their work.

## Effective date:

This policy took effect on March 1, 2010.

## Definitions:

**Research:** as it applies to the activities of the CFIA, is scientific investigation, analysis or synthesis conducted by the CFIA, alone, or with collaborating organizations, in order to produce new knowledge or new technology. Research results must support sound, risk-based decision making, policy development and implementation, and program delivery by the CFIA. Products of research must be innovative, must meet the needs and mandate of the CFIA and must provide value to Canadians (that is, enhance public good).

**Development:** is systematic work which draws on existing knowledge and technology derived from research and practical experience. It is aimed at producing new knowledge and/or producing or improving methods, devices or reagents.

**Research and development:** often employs technology transfer, including the installation, application and validation of new methods or processes.

**Research and development misconduct:** is taken here to mean fabrication, falsification, plagiarism, or other practices that seriously deviate from those that are commonly accepted within the scientific community for proposing, conducting, or reporting research and development. It does not include honest errors or honest differences in interpretation of data. Misconduct in research and development is constituted by a failure to comply with the provisions of this policy.

## Policy statement:

The conduct of research and subsequent development is fundamental to the delivery of the CFIA mission. Research and development results can be used in key policy decisions. These results support sound, risk-based decision making, policy development and implementation, and program delivery.

The CFIA is a federal regulator. All CFIA employees, including research scientists and scientific professionals, recognize that their actions can have serious impact on human, animal and plant health; on the Canadian economy and trade; and on the environment. They therefore must respect the decisions of the CFIA with respect to the disposition of their work.

The CFIA has high standards for research and development, which apply to all its employees who perform research and development and to those external persons who perform research and development on its behalf. Employees of the CFIA must adhere to high standards in their research and development work because failure to meet acceptable standards damages not only the researcher but also his or her colleagues and the reputation of the CFIA and the Government of Canada at large. It can also impact negatively on the parties regulated, and the public served, by the CFIA. The CFIA does not permit the integrity of its research and development programs to be placed in doubt, for any reason.

## Scope:

This policy applies to all employees of the CFIA, including students, who conduct research and development. It also applies, in principle, to external persons working on research and development projects conducted under the auspices of the CFIA, where the CFIA provides resources/funding.

## General ethical and safety considerations:

It is expected that CFIA employees conducting research and development are committed to high standards of professional conduct. Employees have a duty to ensure that their research and development work enhances the good name of the CFIA and the discipline to which they belong.

1. Employees should participate only in work: sanctioned by the CFIA through the appropriate CFIA approval processes; which conforms to accepted ethical, and safety, standards; and which they are competent to perform. Where an employee is in doubt about the CFIA *Policy on the Responsible Conduct of Research and Development*, advice should be sought from the director/manager of the appropriate CFIA laboratory; the appropriate laboratory executive director; or the research national managers of Science Branch at the CFIA's head office. Advice may also be sought from relevant research and development and other approval committees, and laboratory ethics and safety committees (for example, animal care). Employees should also refer to the second edition of the CFIA's *National Laboratory Safety Manual*.

2. Employees should observe any special standards of work performance and ethical conduct. This includes those imposed by law (for example, Workplace Hazardous Materials Information System, etc.), by guidelines of regulatory agencies (for example, Atomic Energy of Canada Limited, the Canadian Council on Animal Care, etc.), or by the CFIA in relation to particular types of research and development.

3. In general, research results and methods should be open to scrutiny by colleagues within the CFIA, and, through appropriate publication, by the profession at large. Confidentiality may be necessary for a limited period in the case of contracted research or of non-contractual research, which is under consideration for patent protection.

## Guiding principles:

The CFIA *Policy on the Responsible Conduct of Research and Development* prescribes standards of work performance and ethical conduct expected of all persons (including students engaged in research and development at, and for, the CFIA, based upon the following guiding principles:

1. The CFIA is a federal regulator. All CFIA employees, including researchers, recognize that their actions can have a serious impact on human, animal and plant health; on the Canadian economy and trade; and on the environment. They therefore respect the decisions of the CFIA with respect to the disposition of their work.

2. Employees have an obligation to achieve and maintain the highest standards of intellectual honesty in the conduct of their research and development.

3. Employees should, in all aspects of their research and development:

   (i) demonstrate integrity and professionalism,

   (ii) observe fairness and equity,

   (iii) avoid real, perceived or apparent conflicts of interest, and

   (iv) ensure the safety of those associated with the research and development.

4. Research and development methods and results should usually be open to scrutiny and debate by other CFIA staff and, through publication, by the profession.

5. Research and development findings shall not be reported in the public media before they have been reported to, and accepted for publication or dissemination by, relevant CFIA management and programs including laboratory directors/managers and laboratory executive directors.

6. The CFIA recognizes that, when researchers and scientists suspect results may impact public policy or concern the public, they must seek advice from their laboratory director/manager and laboratory executive director or the research national manager at the CFIA's head office, who will consult with the appropriate CFIA authorities.

7. Where there is private reporting of research and development that has not yet been exposed to peer review scrutiny, especially when it is reported to prospective financial supporters, employees have an obligation to explain fully the status of the work and the peer-review mechanisms to which it will be subjected.

8. Employees must be aware of, and adhere to, ethical principles of justice and veracity, and of respect for people and their privacy and avoidance of harm to them, as well as respect for non-human subjects of research.

9. Where research and development procedures are of a kind requiring approval by the animal care committees of the CFIA laboratories, or by other validly constituted regulatory committees, research and development must not proceed without such approval.

10. All reasonable steps must be taken to ensure that published reports, statistics and public statements about research activities and performance are complete, accurate and unambiguous.

11. Employees must familiarize themselves with the CFIA *Policy on the Responsible Conduct of Research and Development* and ensure that its provisions are observed.

12. Failure to comply with the provisions of this policy may be grounds for disciplinary action.

13. In case of doubt concerning the integrity of the conduct of research and development work, employees must seek advice from the appropriate CFIA laboratory director/manager, the appropriate laboratory executive director, and/or the research national manager at the CFIA's head office.

## Specific requirements:

### 1. Data storage and retention

1.1 Data (including electronic data) must be recorded in a durable and appropriately referenced form. Data management should comply with relevant CFIA policies and protocols (for example, *Recorded Information Management Policy*, etc.).

1.2 Data must be held for sufficient time to allow reference. For data that is published, this may be for as long as interest and discussion persists following publication. It is recommended that the minimum period for retention is at least five years from the date of publication but it is important to refer to the appropriate CFIA policies as noted above.

1.3 Wherever possible, original data must be retained in the CFIA laboratory in which they were generated. Individual researchers should be able to hold copies of the data for their own use. However, retention solely by the individual researcher provides little protection to the researcher or the CFIA in the event of an allegation of falsification of data. When the data are obtained from limited access databases, or via a contractual arrangement, the location of the original data must be identified—or key information regarding the database from which it was collected—and this must be retained by the researcher or laboratory unit.

1.4 Data related to publications must be available for discussion with other CFIA employees if requested. Where confidentiality provisions apply (for example, where the staff/CFIA has given undertakings to third parties), it is desirable for data to be kept in a way that reference to them by third parties can occur without breaching such confidentiality.

1.5 *The Public Servants Inventions Act* has been developed to protect intellectual property rights belonging to the CFIA and other federal departments and agencies or to pass on obligations of confidence to others in relation to confidential information received by the CFIA. Employees should be familiar with the CFIA's *Intellectual Property Policy* and related confidentiality agreements.

1.6 Employees must enquire whether confidentiality agreements apply and the director/manager of the CFIA laboratory must inform employees of their obligations with respect to these provisions. All confidentiality agreements should be made known at an early stage to the laboratory executive director.

1.7 Employees must ensure appropriate security of any confidential material, including that held in electronic media. Where computing systems are accessible through networks, particular attention to security of confidential data is required. Security and confidentiality must be ensured in a way that copes with multiple staff and the departure of individual staff. Reference should be made to the Government of Canada *Policy on Government Security* and the CFIA *Security Management Policy*.

1.8 The research and development results and the data that produced these results are the property of the CFIA unless specified otherwise in a written agreement.

## 2. Publication and authorship

2.1 A publication must contain appropriate reference to the contributions made by all participants in the relevant research and development.

2.2 On each occasion that research and development is made public, the CFIA *Guidelines on Scientific Publication* must be followed.

2.3 Authorship is defined as substantial participation, where a person is involved in all of the following:

(i) conception and design, or analysis and interpretation of data,

(ii) drafting the article or revising it critically for important intellectual content, and

(iii) final approval of the version to be published.

An author's role in a research-and-development output must be sufficient for that person to take public responsibility for at least part of the output in that person's area of expertise. No person who is an author, consistent with this definition, must be excluded as an author without their permission, in writing.

2.4 A person who has not participated in conceiving, executing or interpreting at least part of the relevant research and development is not to be included as an author of a publication derived from that research-and-development output. Participation solely in the acquisition of funding or the collection of data does not justify authorship. General supervision of the research and development group is not sufficient for authorship.

2.5 When there is more than one co-author of a research-and-development output, one co-author (by agreement amongst the authors) should be nominated as the responsible or principle author for the whole research-and-development output, and should take responsibility for record keeping regarding the research-and-development output.

2.6 Contributions to research and development made by any persons, which are insufficient for them to be included as authors, should be recognized in any publication derived from that research and development. Convention demands that individuals and organizations providing facilities should also be acknowledged. Publications must include information on the sources of financial support for the research and development. Financial sponsorship that carries an embargo on such naming of a sponsor should be avoided.

2.7 A publication which is substantially similar to another publication derived from the same research and development must contain appropriate reference to the other publication.

2.8 Staff who submit substantially similar work to more than one publisher should disclose that fact to the publishers at the time of submission.

2.9 Confidentiality provisions relating to publications may apply in circumstances where the CFIA has made or given confidentiality undertakings to third parties or confidentiality is required to protect intellectual property rights. It is the obligation of the staff to enquire at an early stage as to whether confidentiality provisions apply and it is the responsibility of the director/manager of the CFIA laboratory to inform staff of the obligations with respect to these provisions.

## 3. Supervision of students

3.1 Each research and development unit or CFIA laboratory must adopt guidelines for supervision of research and development in accordance with those prescribed by the Science Branch Executive Committee.

3.2 A research and development supervisor must observe and undertake the responsibilities set out in these guidelines.

3.3 A person must decline appointment as a research and development supervisor unless that person expects to be able to discharge the responsibilities set out in these guidelines.

3.4 A research and development supervisor must ensure that all relevant agreements respecting confidentiality and conflict of interest have been understood and signed.

3.5 All students must take, as a minimum, the online course, The Values: Guiding Principles in the Canadian Food Inspection Agency and should attend, if at all possible, the CFIA Orientation Program.

## 4. Disclosure of conflicts of interest

4.1 The CFIA *Conflict of Interest and Post-Employment Code* should be read in conjunction with this section.

4.2 Employees must make appropriate disclosure to the appropriate manager and/or the Conflict of Interest Secretariat of affiliation with, or financial involvement in, any organization or entity with a direct interest in the subject matter or materials of the research and development. Such disclosures cover the full range of potential interests, including the direct benefits, such as sponsorship of the investigation; or indirect benefits, such as the provision of materials or facilities; or the support of individuals, such as provision of travel or accommodation expenses to attend conferences. Such disclosure should cover any situation in which the conflict of interest may affect, or may be perceived to affect, any decision regarding other people.

4.3 Appropriate disclosure must be made to editors of journals, to the readers of published work, and to external bodies from which funds are sought.

4.4 Employees have an obligation to disclose at the time of reporting or proposing research (for example, in a grant application), any conflict of interest which has the potential to influence research and investigations, publication and media reports, grant applications, applications for appointment, and promotion.

## 5. Research and development misconduct

5.1 Research and development misconduct is taken here to mean fabrication, falsification, plagiarism, or other practices that seriously deviate from those that are commonly accepted within the scientific community for proposing, conducting, or reporting research and development. It does not include honest errors or honest differences in interpretation of data. Misconduct in research and development is constituted by a failure to comply with the provisions of this and, without limiting the generality of this section, includes:

(i) the fabrication or falsification of data;

(ii) plagiarism, which means the presentation of the documented words of another as their own, without attribution appropriate for the medium of presentation;

(iii) using any information in breach of any duty of confidentiality associated with the review of any manuscript or grant application;

(iv) intentionally omitting reference to the relevant published work of others for the purpose of inferring personal discovery of new information;

(v) misleading ascription of authorship to a publication including the listing of authors without their permission;

(vi) attributing work to others who have not in fact contributed to the research and development;

(vii) the lack of appropriate acknowledgment of work primarily produced by a research and development student/trainee or associate;

(viii) interference with any research-and development-related property of another person, including without limitation the apparatus, reagents, biological materials, writings, data, hardware, software, or any other substance or device used or produced in the conduct of research;

(ix) misrepresentation, as in stating or presenting a material or significant falsehood;

(x) misrepresentation, as in omitting a fact so that what is stated or presented as a whole states or presents a material or significant falsehood.

5.2 Deliberate inclusion of inaccurate or misleading information relating to research and development activity in curriculum vitae, grant applications, job applications or public statements, or the failure to provide relevant information, is a form of research misconduct.

5.3 Any person who suspects research and development misconduct or who has questions over the conduct of a particular piece of research and development should consult either the director/manager of the appropriate CFIA laboratory; the appropriate laboratory executive director; or the head office research national manager.

5.4 Allegations of research and development misconduct are to be directed to either the director/manager of the appropriate CFIA laboratory; the appropriate laboratory executive director; or the head office research national manager. The Vice-President, Science Branch will be informed of the allegations at that time. The Vice-President, Science Branch will inform the CFIA's Senior Integrity Officer.

5.5 If an allegation of research and development misconduct is made, an investigation to determine the facts shall be carried out by the appropriate head office research national manager or the Vice-President, Science Branch, or by another person appointed by the Vice-President, Science Branch. This investigation will include provision for a written statement of any allegations to be provided to the person(s) against whom such allegations are directed, and for a written response from that person to be received and considered. The findings of this investigation shall be reported to the Vice-President, Science Branch who will inform the CFIA Senior Integrity Officer.

5.6 The CFIA's conduct of investigations of research and development misconduct shall occur in such a way as to protect the interests of interested parties. Such fair dealing will consider the protection of persons making allegations in good faith and of persons accused of misconduct.

5.7 Once an investigation has been completed, corrective action, including disciplinary measures, may be taken according to the CFIA's *Discipline Policy*.

5.8 Any such investigation will continue, even if the person accused of such misconduct resigns from the CFIA. Distortions of the research record must be rectified, whether or not the persons involved remain at the CFIA.

5.9 If research and development misconduct is established, the CFIA will report findings of this misconduct to any funding agency that funded work related to projects in which such misconduct occurred, or which is currently supporting the person found to have engaged in misconduct, and to journals and other media through which the research and development in question was reported.

5.10 Notwithstanding Sections 5.3 to 5.9, inclusive, if any person suspects or has reason to believe that the research and development misconduct represents wrongdoing as defined in the *Public Servants Disclosure Protection Act*, they can make a confidential disclosure to their direct supervisor, the CFIA's Senior Integrity Officer or the Public Sector Integrity Commissioner, according to the process outlined in the CFIA *Policy on the Internal Disclosure of Information Concerning Wrongdoing*. Any questions with respect to the policy on internal disclosure should be directed to the CFIA's Senior Integrity Officer.

The CFIA *Policy on the Internal Disclosure of Information Concerning Wrongdoing* sets out an internal mechanism to receive and manage information related to the disclosure of wrongdoing; ensures that disclosures are reviewed and investigated in a timely manner; and ensures that appropriate administrative and disciplinary measures are in place to correct instances of wrongdoing. This policy addresses wrongdoing as defined in the *Public Servants Disclosure Protection Act* and as such is not intended to replace existing redress/recourse mechanisms such as those outlined in Sections 5.3 to 5.9, inclusive.

## Managerial responsibility:

The Vice-President, Science Branch is responsible for monitoring the overall compliance with this policy and its implementation within the CFIA. Directors/managers of appropriate CFIA laboratories are responsible for monitoring compliance with this policy within their laboratories.