Guidelines for Funding Research Projects

June 2012

NOTE: These are general guidelines that apply to all projects funded by Genome Canada. Specific Requests for Applications will note any exceptions to these guidelines or have additional guidelines applicable to projects funded in that particular competition.

GenomeCanada

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1. VISION, MISSION AND OBJECTIVES OF GENOME CANADA

As stated in Genome Canada's Strategic Plan for 2012-17, Genome Canada's vision is to harness the transformative power of genomics to deliver benefits to Canadians. Its mission is to lead the Canadian Genomics Enterprise by:

1. Connecting ideas and people across public and private sectors to find new uses and applications for genomics;
2. Investing in large-scale science and technology to fuel innovation; and,
3. Translating discoveries into applications to maximize impact across all sectors.

Genome Canada is committed to increasing Canada's position among the world leaders in genomics1 research in key areas such as health, agriculture, energy, environment, forestry, fisheries, mining and technology development. It is also committed to a leadership role on the ethical, environmental, economic, legal and social aspects and potential implications associated with genomics research (GE^3LS), and to communicating with Canadians on these and other issues.

Genome Canada will fulfill its mission through its four objectives:

i. Respond to societal needs by generating discoveries and accelerating their translation into applications.
ii. Attract greater investment in genomics research from a broad range of stakeholders, in particular the private sector.
iii. Enhance the impact of genomics by transforming knowledge of the ethical, environmental, economic, legal and social challenges and opportunities into sound policies and practices.
iv. Enhance the recognition of the value of genomics by increasing stakeholder appreciation of genomics, its application and implications.

2. SUPPORT OF GENOMICS RESEARCH PROJECTS

In support of its objectives, Genome Canada funds and manages milestone-driven research projects across its seven strategic sectors (agriculture, energy, environment, fisheries, forestry, health and mining). Its international peer review process, which assesses research excellence and benefits for Canada, and its due diligence review of management and financial capabilities, ensures that funding is awarded to only the very best projects – measured by international standards of excellence. The projects must be of a scale and scope appropriate for the goals of the particular competition, be internationally competitive and have the potential for major impact. To pursue the advancement of genomics in Canada and to maximize its effectiveness, Genome Canada encourages research collaboration across Canada and internationally.

[1] The term genomics is defined here as the comprehensive study, using high throughput technologies, of the genetic information of a cell or organism, including the function of specific genes, their interactions with each other and the activation and suppression of genes. For purposes of describing Genome Canada's mandate it also includes related disciplines such as bioinformatics, epigenomics, metabolomics, metagenomics, nutrigenomics, pharmacogenomics, proteomics and transcriptomics.

Six Genome Centres located across Canada support genomics research at a regional level. They assist applicants in preparing competitive applications, facilitate access to Science and Technology Innovation Centres and other service providers, help projects with aspects of project development and management and, working with the applicants, are responsible for securing necessary co-funding. Eligible applicants must submit all proposals and supporting documentation to Genome Canada through a Genome Centre. The Genome Centres are responsible for selecting which projects to put forward to Genome Canada. Once projects are approved Genome Centres have the lead in ensuring their effective management and monitoring.

Genome Canada will formally recognize projects as being co-led by two or more Genome Centres in instances where the project is: undertaking research in at least two different regions of the country; led by two or more Project Leaders, with each contributing similar intellectual input to the project; and, comprised of an approximately equal split in funding between the institutions in the different regions.

3. GENERAL GUIDELINES

3.1 Investigator Eligibility

Genome Canada funds can be awarded to researchers and scholars affiliated with the following institutions and organizations:

- Canadian post-secondary organizations and their affiliated institutions including hospitals and research institutes;
- Canadian non-federal government departments or agencies and not-for-profit organizations (including community or charitable organizations) with an explicit research or knowledge-translation mandate.

Research teams may include as co-applicants international, private sector (for-profit organizations), or federal laboratory scientists. However, Genome Canada funding is restricted to work performed within Genome Canada eligible institutions, i.e., Genome Canada will not support research to be undertaken outside Canada, in for-profit organizations or in federal laboratories, except for costs incurred based on a reasonable fee-for-service arrangement or contract.

3.1.1 Participant Categories

Project Leader

Each project must identify one Project Leader. The Project Leader of a Genome Canada funded project is responsible for the intellectual direction of the proposed research and assumes administrative and financial responsibility for funds which will be paid to his/her institution.

In applications where the responsibility for the intellectual direction of the research is shared more or less equally between two or more individuals the project may also nominate a co-Project Leader.

Although investigators from federal laboratories, the private sector or outside of Canada may share the responsibility for the intellectual direction of the proposed research, they cannot assume the administrative and financial responsibility for the funds and therefore, cannot be the sole Project Leader of a Genome Canada funded project. However, they can be a co-Leader.

Co-Applicant
A Co-applicant is a researcher who makes a substantial intellectual contribution to the proposed research and who will be involved in the day-to-day execution of the project. Co-applicants will likewise be responsible for the funds paid to their institutions.

Collaborator
A Collaborator is an individual who is not involved in the day-to-day execution of the research but whose role is to provide a specific service or expertise (e.g., access to equipment, provision of specific reagents, training in a specialized technique, statistical analysis, access to a patient population, etc.).

End-User
An end-user is defined as those organizations (and/or individuals who could represent end-user organizations) who are able to use the information generated through research to make informed decisions on issues such as practice guidelines and standards, policies, programs and product development.

3.2 Ethical, Environmental, Economic, Legal and Social Aspects of Genomics Research (GE^{3}LS)[2]

3.2.1 Integrated GE^{3}LS

Unless specified otherwise in a Request for Applications (RFA), all large scale genomics projects must include an investigation into some ethical, economic, environmental, legal and/or social (GE^{3}LS) challenges or opportunities of considerable significance to the proposed genomics research, its objectives and/or expected outcomes. Such investigation should be carried out by co-applicants with relevant expertise, as the overarching objective of integrated GE^{3}LS research is to support collaboration between genomic scientists and GE^{3}LS researchers throughout all aspects of research projects to advance knowledge creation and its translation[3].

To identify salient GE^{3}LS research questions, Project Leaders may consult researchers with expertise in GE^{3}LS-related disciplines, the CANADAGE^{3}LS Database, or GE^{3}LS programs staff of the regional Genome Centres or Genome Canada[4].

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[2] The acronym GE^{3}LS stands for "Genomics and its Ethical, Environmental, Economic, Legal and Social aspects". However, it should be understood broadly as genomics-related research endeavors and related activities undertaken from the perspective of the social sciences and humanities. Therefore, it is not strictly limited to disciplines that make-up the acronym but rather encompasses all those that rely on quantitative and qualitative methodologies to investigate genomics in society, and help establish a basis to inform applications, practices and policies.

[3] Summaries of previously-funded integrated GE^{3}LS projects are available online at **http://www.genomecanada.ca/en/ge3ls/research/**

[4] See GE^{3}LS contact details at each of the regional Genome Centres: **http://www.genomecanada.ca/en/ge3ls/contact.aspx**

As members of an integrated team, GE^{3}LS co-applicants should be actively engaged in the early stages of project development to provide strategic input into the research design and the budget planning process, accordingly and should remain involved throughout the course of the project as integral members of the research team.

GE^{3}LS co-applicants are expected to develop a scholarly research plan that is directly related and complementary to, the proposed milestones of the overall genomics project and also represents a systematic investigation designed to advance generalizable knowledge in relevant academic fields.

GE^{3}LS co-applicants are encouraged to coordinate, wherever possible, with other GE^{3}LS researchers working on similar questions in other Genome Canada-funded projects to maximize opportunities for synergies and minimize potential duplication.

In addition to the above requirements, GE^{3}LS expertise could be sought out, as needed, through appropriate involvement in the project's proposed governance structure (for example, GE^{3}LS membership on scientific advisory boards) and/or through close alignment with end-users or other stakeholders involved in the project.

3.2.2 Large-Scale GE^{3}LS Research

Depending on the RFA of a particular competition, large-scale GE^{3}LS research projects that investigate in an innovative and comprehensive manner significant challenges and/or opportunities in achieving the objectives of the RFA are eligible for support. It is expected that large-scale GE^{3}LS projects would demonstrate active engagement with the genomics scientific community in the planning of the research and its conduct. This may entail sustained interactions with other projects and/or their integrated GE^{3}LS components.

3.3 Socio-Economic Benefits

All applications must describe, with supporting evidence, the deliverable(s) that will be realized by the end of the project that will lead to social and/or economic benefits for Canada. For more details on socio-economic benefits as they pertain to any particular competition, refer to that competition's RFA**.**

Where appropriate, for example when new products and/or services will be developed, a clear commercialization process, which includes intellectual property (IP) management and ownership, technology transfer and benefit sharing, must be described. While eligible costs include those related to the development of the plan to realize benefits for Canada, costs associated with subsequent commercialization are not eligible (e.g., product development, testing, and marketing – see the Eligible Costs section for more details).

3.4 Requirement for Technology Services from Others

Applications for support of a research project must include a detailed description of all outsourced technology services that will be required. It is the obligation of the project team to understand and describe the science that will be outsourced. The leaders of projects should work with their Genome Centre to determine the technologies required for the proposed research and to decide how best to satisfy these requirements. Projects are encouraged to work with Genome Canada supported Science and Technology Innovation Centres (STICs).

The request for services from all providers must be described in the research proposal and further detailed in the *Services from Others* section of the budget form. Applications must include letters from service providers, description of the service(s) to be provided, unit costs, number of units required, personnel requirements, data analysis requirements, and other relevant details. Genome Canada-supported STICs have been established to provide technologies and expertise to projects and to avoid duplication of effort across the country.

Although Project Leaders are encouraged to use Genome Canada funded STICs, they may use other fee-for-service providers, either Canadian or foreign. Project leaders must include a justification for their choice of fee-for-service providers and, for out of country fee-for-service providers, include the reasons for not using a Genome Canada funded STIC. For information on the Genome Canada supported STICs, refer to http://www.genomecanada.ca/en/portfolio/technology.aspx

3.5 Handling of Data and Resources

3.5.1 Data and Resource Management

Applications must include clearly defined policies and plans for managing the data and resources to be generated.

3.5.2 Data Analysis

Unless specified otherwise in the RFA, applications must present a clear plan for the analysis of data. The plan must include: i) a diagram showing the data flow for the information created by all project components; ii) a description of the data flow; iii) a description of the computer analysis strategies for the data; iv) a plan for the long-term preservation (archiving) of the analysis results and, where appropriate, raw data; and v) a description of personnel requirements needed to realize the data analysis.

3.5.3 Data and Resource Sharing

All Genome Canada funded projects must comply with Genome Canada's policy on Data Release and Resource Sharing. Genome Canada expects researchers to share data and resources as rapidly as possible. Where the goal of the project is to produce data or resources for the wider scientific community, the project must follow the data release and resource sharing principles of a “Community Resource Project”, defined as “a research project specifically devised and implemented to create a set of data, reagents or other material whose primary utility will be as a resource for the broad scientific community”. A project’s Data Release and Resource Sharing plan must be approved by Genome Canada and must remain current with internationally accepted standards.

3.5.4 Intellectual Property

Ownership of intellectual property created or acquired as part of projects in which Genome Canada is directly or indirectly involved shall be in accordance with each of the participant’s (i.e., Federal or Provincial government departments or Crown Corporations, private sector companies, universities, research hospitals or any other participants) internal intellectual property policy and Provincial and or Federal legislation, if applicable (See Section 1 of Genome Canada’s Intellectual Property policy) Applicants should also contact their Genome Centre for information on specific Genome Centre guidelines related to intellectual property.

3.5.5 Access to Research Publications

Research publications are an important output of the research funded by Genome Canada and free, online access to these publications is paramount. Genome Canada recommends that peer reviewed publications that have been supported, in whole or in part, by Genome Canada be made freely accessible online, in a central or institutional repository, as soon as possible, and, at the latest, six months after the publication date. Genome Canada encourages the scientists it funds to publish wherever is best for their work. Specific recommendations can be found in the Genome Canada Policy on Access to Research Publications

3.6 Acknowledgement of the Contribution of the Government of Canada

Projects must commit to acknowledging the contribution of the Government of Canada through Genome Canada and the lead Genome Centre, as well as all other relevant funders, in research publications and all communications including press releases, posters and oral presentations. In addition, visual presentations such as seminars and websites must include the Genome Canada logo in compliance with Genome Canada's Brand Standards Guide.

4. APPLICATION AND EVALUATION PROCEDURES

Eligible applicants must submit proposals at every application stage through a Genome Centre and it is the responsibility of the Centre to determine which projects to put forward.

Application requirements may vary from the general guidelines described below depending on the focus of the competition, complexity of projects, and number of applications expected within a particular competition (see the RFA and application forms for specific requirements of a particular competition).

The application process will be described in the RFA and may involve up to three stages – Registration, Pre-Application and Full Application – and the appropriate application forms are to be used without modification of formatting at each stage.

Page limits will be strictly enforced; pages beyond the limits and unsolicited appendices will be removed by Genome Canada staff before they are reviewed. If this occurs, due to the tight timelines for review, applicants will be notified but they will not have the opportunity to revise their applications to meet the page limits.

It is the responsibility of the Genome Centre to evaluate the eligibility of each registration, pre-application and full application before submitting it to Genome Canada. The final decisions on eligibility will then be made by Genome Canada. When applicable, for applications submitted to a targeted competition, relevance to the targeted area will also be evaluated. The Genome Centre must ensure that each proposal satisfies all the requirements of the competition as well as Genome Canada's evaluation criteria, as defined in the RFA of a particular competition.

In cases where applicants submit the same (or very similar) application to one or more Genome Canada competitions with overlapping review periods, Genome Canada will automatically withdraw the second application from the competition.

4.1 Registration

A brief Registration form must be submitted through a Genome Centre and will be used to provide early guidance to Genome Canada on elements such as who is applying, what they are planning to do, research areas, expected deliverables, approximate budgets and suggested reviewers. This will allow for screening for eligibility by the Genome Centres and facilitate the early selection of reviewers for the peer review process. Applicants will be invited to submit the names of potential reviewers who do not currently reside or work in Canada and with whom the applicants have no conflict of interest. Only applicants who submit a registration that is deemed eligible will be allowed to submit a Pre-Application. Information from eligible Registrations (i.e., name of project leader(s), lead institution, title of project, research areas and keywords) will be posted on the Genome Canada Website to facilitate the identification of areas of potential synergy between applications from across the country so that applicants could consider engaging with other researchers on a common project. This will also make possible the exchange of required information between project teams and Genome Canada's Science and Technology Innovation Centres, where applicable.

4.2 Pre-Application

For the Pre-Application applicants will be asked to submit through a Genome Centre a short proposal, as detailed in the particular RFA. Normally, it will include short descriptions of the following:

- the proposed research;
- the expected deliverables of the research;
- how the team will engage end-users in the project;
- the potential socio-economic benefits of the research; and,
- high level management and financial information (including budget and proposed co-funding).

Pre-Applications must address the evaluation criteria established for the competition.

Pre-Application Review Process

A group of experts with the appropriate expertise will evaluate the Pre-Application, normally focusing on the quality of the research plan and the potential for socio-economic benefits but also taking into consideration the management and financial plans (see the evaluation criteria as presented in the RFA). The review panel will make a recommendation of those projects considered to be competitive, and only the most competitive proposals will be invited to submit full applications. The applications will again be checked for eligibility and, if required, relevance to targeted areas. Information from approved pre-applications (i.e., name of project leader, lead institution, title of project, research areas and keywords) will be posted on the Genome Canada Website to further facilitate the exchange of required information between project teams and the Science and Technology Innovation Centres (where applicable).

4.3 Full Application

Those applicants successful at the pre-application stage will be asked to submit a full application. Applications must be submitted through one of the regional Genome Centres for review prior to submission to Genome Canada. Applications must address the evaluation criteria established for the competition and be presented on the appropriate application and budget forms. A final check for eligibility will be carried out.

Full Application Review Process
To ensure that the objectives of Genome Canada are met, proposals are assessed against the evaluation criteria established for the competition and specified in the RFA. Normally these fall into three categories: 1) research proposal; 2) socio-economic benefits; and, 3) management and finance. For applications submitted to a targeted competition, relevance will also be considered.

For all competitions a multidisciplinary, international committee of experts with expertise in assessing all the different review criteria, is established to review applications. The committee will include members with expertise in the research areas of the applications as well as GE^3LS and genomics technologies, as required. The individuals reviewing the socio-economic benefits will include Canadians, as appropriate. The committee evaluates all aspects of an application, taking into consideration the evaluation criteria presented in the RFA. Written reports may be solicited from external peer reviewers to assist the committee and to provide additional expertise. The review committee may meet with and interview representatives from each project through a face-to-face meeting, particularly for larger scale projects.

In the event of Genome Canada receiving a large number of full applications, a streamlining process may be used to assist in reducing the number of applications prior to the meeting of the review committee. This process includes a full review of the complete research plan of each application; however, only those deemed to be of the highest merit will remain in the review process and be considered at the review meeting.

The review committee offers recommendations and advice to Genome Canada on all aspects of applications, including proposed budgets. The Board of Directors makes the final funding decisions. Only those proposals demonstrating the highest degree of overall excellence in terms of the review criteria will be funded. Subsequently, investigators are provided with a written evaluation of the strengths and weaknesses of their application and the Board decision through a Notice of Award. All approved projects are subject to a Status Report Process to ensure that all applicable conditions are met prior to the release of funds.

Genome Canada may adjust its evaluation processes where warranted by the complexity of proposals received or other relevant factors. Any changes will be rapidly communicated through Genome Canada's website and through the Genome Centres.

5. PROJECT MANAGEMENT AND OVERSIGHT

5.1 Project Managers

Unless specified otherwise in the RFA of a particular competition, all approved projects must have a dedicated project manager. Project managers coordinate administrative and reporting requirements and support the project's scientific enterprise.

5.2 Science Advisory Boards

Unless specified otherwise in the RFA of a particular competition, all approved projects must have a Science Advisory Board (SAB) to provide advice and guidance to the research team to help ensure that the project achieves its stated objectives and milestones. The membership of the SAB must be completely independent from the project, with no real or perceived conflicts

of interest and should be composed of experts who will work with the project to maximize its successful outcome.

While projects are not required to submit details of their SAB implementation plan and membership at the time of application, these must be approved by Genome Canada before funds can flow to the project and adhere to the SAB Terms of Reference set out by Genome Canada. Please note that there is no advantage in the review process in having SAB members named in the application.

6. INTERIM REVIEW

Unless specified otherwise in the RFA of a particular competition, Genome Canada undertakes an interim review of each approved project approximately midway through the term of the project. The interim review evaluates the progress of the research (meeting of milestones, key decision points, deliverables, etc.), including GE^{3}LS, the implementation plan for the remainder of the project, the changes in research direction (made or proposed), the progress towards ensuring the deliverables and socioeconomic benefits are realized, and the financial and management aspects of the project. The review takes into consideration the timeframe during which the research has been ongoing and is used to provide advice regarding alternative approaches to strengthen the project. Requests for additional funds are not considered at the time of the interim review. The results of the Interim Review will determine whether funding should be continued, reduced or terminated. The recommendations of the review committee are submitted to the Genome Canada Board of Directors for a final decision.

The nature of the interim review will vary according to the type of projects funded through a particular RFA. Details will be provided in the RFA and/or with the Notice of Award.

7. FUNDING

Unless otherwise specified in a particular RFA, Genome Canada will fund up to 50% of approved eligible costs for new research activities that are an integral part of the Genome Canada approved project. Genome Centres, working with the applicants, are responsible for securing the remaining 50% of funding from other sources. There may be instances where, due to strategic partnerships organized on a program basis by Genome Canada, or the nature of the proposals being sought, co-funding may not be required. The RFA will detail the requirements for co-funding for any given competition.

7.1 Eligible Costs

Eligible costs are defined as reasonable costs for items that directly support the objectives of the Genome Canada approved project. Budgets must **NOT** include items for which funding has already been approved from other sources, unless the request for funding of these items was specifically made to support activities in the Genome Canada project and meets all other eligibility criteria, e.g., timing of funding request. Expenses funded through Genome Canada must be incurred after the Notice of Award (NOA) to be considered as eligible costs. However, expenses covered by eligible co-funding incurred up to six months prior to the NOA may be considered eligible costs.

Specific RFAs will describe any exceptions or additional guidelines with respect to eligible costs applicable to projects funded in any particular competition.

Eligible costs may include the following:

i. Salaries:

- Salaries and benefits for team members (note that salaries of researchers or senior management currently funded by their respective organizations are **not** considered eligible costs).
- The actual benefit rates as charged by the host institution. For institutional benefit rates higher than 20%, supporting documentation (such as a letter from the institutional human resources department) must be provided.
- The actual cost of release time from teaching and clinical duties, if supported by a letter from the host institution.
- Annual inflation for salary expenditures in the second and later years of the project at actual rates as charged by the host institution; for inflationary increases exceeding 1.5% of total salary and benefits, supporting documentation must be provided.

ii. Equipment:

- Equipment is defined as any item (or interrelated collection of items comprising a system) which is used wholly or in part for the research proposed and meets all three of the following conditions: 1) nonexpendable tangible property; 2) having a useful life of more than one year; and, 3) a cost of $2,000 or more.
- The equipment category also includes research infrastructure such as scientific collections and information databases used wholly or in part for the research proposed.
- Please note that the costs of equipment maintenance contracts and general maintenance of research infrastructure are considered consumables expenses (see below).

iii. Consumables:

- Material and supplies: includes research related items that must meet only one of the following conditions: 1) expendable tangible property; or, 2) useful life of 1 year or less; or, 3) a cost of less than $2,000. As an example, a laptop computer that costs less than $2,000 would be considered a consumable even though it is a nonexpendable tangible item with a useful life of more than one year.
- The consumables category also include items such as extended warranties, equipment service contracts, lease of research equipment, and travel directly related to the conduct of the research activities (including GE^3LS) but <u>excludes</u> salaries, equipment, and services from others.

iv. General and Administrative Costs

- Administrative costs can include, for example, travel for project team members unless directly associated with research activities, costs associated with a project's SAB, publication costs, communications and public outreach activities, website maintenance, office expenses, costs associated with the preparation for interim review and of final reports.
- Administrative costs must not exceed five percent (5%) of the non-administrative costs of the budget.
- Costs associated with patenting should be included in Services from Others, **not** as administrative costs.

v. Services From Others (S&T)

- The costs related to services provided by STICs or services from other fee-for service providers.
- The development of the plan to realize benefits for Canada including patent registration and filing costs and costs associated with advancing development of products and technology to the proof of concept stage.

Examples of **ineligible** costs include the following:

i. payments to foreign persons, for example, investigators' salaries;
ii. indirect costs to the project, including institutional overhead costs;
iii. rent, renovation or construction of buildings or facilities, and the opportunity cost of using existing infrastructure;
iv. costs associated with commercialization beyond the proof of concept stage such as product development, formulation, packaging, testing, marketing and consultants; and,
v. inflation applied to consumables, equipment, general & administrative costs or services from others.

7.2 Co-funding

Unless specified otherwise in the RFA of a particular competition, Genome Canada requires that at least 50% of the requested funding for eligible costs for any given project be obtained through co-funding from other sources. At the time of application, a well-developed and feasible co-funding plan must be provided (i.e., a plan which demonstrates the extent to which the project is likely to secure at least 75% of the co-funding for eligible costs at time of the release of funds). In cases where co-funding is required, Genome Canada funds will not be released to a project until there is a firm commitment for at least 75% of the co-funding for eligible costs of the project and a well-developed and feasible plan for securing the remaining 25% of co-funding. Genome Canada reserves the right to withdraw its funding for any approved project that does not meet these requirements or if there is a substantial change in project's co-funding status.

7.2.1 Eligible Co-funding

i. Co-funding must be applied for on or after a specified date, which is determined for each competition and specified in the Request for Applications, and must be for eligible costs specifically requested in the Genome Canada budget (see Eligible Costs, Section 7.1) in order to be considered as an eligible co-funding source. On a case-by-case basis, funding applied for before the specified date may be considered eligible co-funding if these funds are specifically re-directed towards the Genome Canada project. A letter from the funder clearly confirming this will be required.

ii. Genome Canada considers any of the following possible co-funding sources, which may be Canadian or foreign, as acceptable:

- Institutional funds, trust funds, or foundations
- Departments and agencies of the federal government (e.g., Agriculture and Agri-Food Canada, Environment Canada, and the Canada Foundation for Innovation). There are however, several notable exceptions. The following agencies are **NOT** considered as eligible co-funding sources: the Canadian Institutes of Health Research (CIHR), the Natural Sciences and Engineering Research Council (NSERC), the Social Sciences and Humanities Research Council (SSHRC), and tri-agency programs (e.g., the Networks of Centres of Excellence, Centers of Excellence for Commercialization and Research, and the Canada Research Chairs)
- Departments and agencies of provincial and municipal governments
- Firms and corporations
- Voluntary organizations
- Individuals
- Venture capital or other investment funds.

iii. Cash contributions as co-funding are preferred. However, in-kind contributions, defined as non-cash eligible budget items, which can be given a cash value, may be considered as co-funding if:

- the value can be reasonably determined and supported by documentation from the supplier; and
- the expenditure represents an item that would otherwise have to be acquired with cash. However, this excludes the cost of pre-existing facilities or equipment (i.e., budgets cannot include the opportunity cost of space or equipment).

iv. The value of existing IP transferred to a project is NOT considered eligible co-funding unless it is a contribution by a supplier of IP (e.g., a software license that would otherwise have to be acquired from a third party supplier). Such items must be supported by appropriate documentation from the supplier's head office.

v. Suppliers' discounts are not considered eligible co-funding.

vi. Funding to support the indirect costs of a project (including overhead) are not eligible. Co-funding must be used to support eligible costs, which are defined as reasonable costs for items that directly support the objectives of Genome Canada approved projects.

7.2.2 Documentation Required to Support Co-funding

Full applications must include complete documentation to support proposed co-funding. This may be in the form of a letter of commitment or an agreement defining the terms and conditions of proposed co-funding. In addition, the project must provide a description of how the co-funding will directly support the objectives of the Genome Canada project. In general, co-funders must explicitly acknowledge the use of funds to co-fund the Genome Canada projects.

The following provides specific examples of documentation required, depending upon the co-funding source, or type:

- From a funding agency, a copy of the full application, project summary, detailed budget and notice of award (if applicable). Documentation must clearly demonstrate that funding is being used for eligible costs included in the budget of the Genome Canada approved project.

- From a provincial government, confirmation that the province will provide co-funding, the amount anticipated and:
  - a description of past commitments to Genome Canada projects, with dates and amounts contributed;
  - a list of the projects in the competition that the government will support, including the project tracking number, the name of the researcher, the title of the project, and the amount of the request from the government;
  - a description of the process that will take place once Genome Canada announces awards, including timelines for decisions and, if appropriate, confirmation that the government will accept Genome Canada's review process; and
  - a letter signed by a high-ranking provincial government official with appropriate authority.

- Other organizations, including industry, charities, and philanthropic organizations:
  - Documentation and supporting information, which clearly demonstrates the organization’s level and terms of commitment to the project. Appropriate documentation could include but is not limited to a Board Resolution, and/or, a letter from the organization’s CEO, legal counsel or Corporate Secretary.
  - Appropriate and reasonable documentation supporting the organization’s financial viability and its ability to deliver on the co-funding. Depending on the organization and the level of funding being committed, documentation could include:
    - a full set of the organization’s most recent audited financial statements, including the Auditor’s Report, a Balance Sheet, Income Statement, Statement of Cash Flows and Notes to the Financial Statements;

- in the case where the audited statements are more than three months old, a full set of the organization's financial statements (prepared within three months prior to the application) including a Balance Sheet, Income Statement, Statement of Cash Flows and Notes to the Financial Statements.
- any other information or documentation (e.g., press releases announcing significant new financing, cash flow projections, etc.) which provides credible support to the organization's financial viability and ability to fulfill its co-funding commitments.

- In-kind contributions should include a clear rationale and calculation of how the value of the contribution was determined (including documentation to support all assumptions, price lists, quotes from suppliers, letters supporting same, etc.). All in-kind contributions must be auditable by outside experts and clear explanations are required if there are any discrepancies between the value outlined in the co-funding document and the budget. Examples of supporting documentation to support non-cash co-funding include:

  - Equipment & Software
    - Letter by senior official from vendor that shows the price that the customer would typically have paid for the equipment or software (net of typical discounts including institutional discounts which are not eligible as co-funding)
    - For custom-made or used equipment, a third party valuation will normally be required
    - For previously developed custom-made software or IP, only new costs are eligible.

  - Samples & Other Biological Resources
    - If samples are typically available at no cost then there is no cost of acquiring such samples and as a result no value can be deemed to be co-funding
    - If samples are typically sold, then any proposed contribution would require the same documentation as equipment and software.

8. ADMINISTRATION

8.1 Project Readiness

Leader(s) of approved projects must meet, through formally submitted documentation, all relevant conditions that may be specified in the Notification of Award (NOA) received from Genome Canada and be in a position to receive Genome Canada funding no later than three months after the effective date of the NOA. ***Genome Canada reserves the right to withdraw funding for any approved project that is not ready to receive funding at that time.***

8.2 Conditions for Release of Genome Canada Funds

Before funds can be disbursed, several conditions for funding must be satisfied and are detailed below.

1. A letter signed by the CEO of the Genome Centre confirming to Genome Canada that: all agreements have been signed between the Genome Centre, Genome Canada, the lead organization, the researchers and the co-funding partners; all other conditions for release of funds have been met; and funds will flow to the project upon receipt of funds from Genome Canada. The agreements must clearly demonstrate agreement among the relevant parties, on all significant issues including but not limited to, the nature of financial contributions, IP ownership and management, data release, the commercialization process, project management, ethics and biohazard certification, the role of the SAB, the funding term, a termination policy, financial and administrative policies, and quarterly reporting of expenses and co-funding status, etc. The agreements must be in compliance with the agreement between Genome Canada and the lead Genome Centre.

2. A revised budget must be submitted for each project. The budget must address all recommendations of the review panel and any reductions to the budget as approved by the Genome Canada Board. Consideration must also be given to the following issues:
    a) *Changes in the Cost of Services*. Given that the cost of services may have changed since the project was submitted for review, projects must provide an updated statement of work (SOW) from service providers, including those funded through Genome Canada, which reflects the current cost of services. The current cost estimates should be used in the revised budget and the budget reduced accordingly.
    b) *Re-examination of general & administrative costs.* Projects must ensure they include required costs (if applicable for a particular RFA) such as costs associated with the project's Science Advisory Board (travel, honoraria etc.), as well as travel costs for the project team to attend Interim Review and other Genome Canada related activities and remain within the 5% limit.

3. *Revised Objectives and Milestones*. Where significant budget adjustments were made as a result of removal or modification of scientific activities, applicants must submit revised objectives, milestones and a Gantt chart.

4. Secured co-funding (received or firmly committed) amounting to a minimum of 75% of the co-funding for eligible costs and a well-developed and feasible plan for securing the remaining 25% of co-funding (if applicable).

5. Acknowledgement that appropriate certification for proposals performing research involving human subjects, human stem cells, animals, biohazards, radioactive materials or possible effects on the environment is in place. Certification must be obtained specifically for the research approved for funding by Genome Canada. In order to release funds to an organization, Genome Canada will accept a letter from the appropriate officials at the organization confirming that:

i. the organization will ensure that all relevant certifications are obtained in accordance with applicable laws, regulations, standards and guidelines, including but not limited to, the most current versions of the following: Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS); CIHR Guidelines for Human Pluripotent Stem Cell Research; Canadian Council of Animal Care (CCAC) guidelines and policies; Canadian Environmental Assessment Act; Public Health Agency of Canada's Laboratory Biosafety Guidelines; and Canadian Food Inspection Agency Containment Standards for Veterinary Facilities;
ii. the organization will not flow funds to an investigator until all relevant certifications are obtained for the research to be undertaken; and,
iii. the organization will provide Genome Canada with copies of certifications, upon request.

6. A Science Advisory Board (SAB) membership and implementation plan that complies with Genome Canada's SAB Terms of Reference and is approved by Genome Canada (if applicable).

7. The project must have a Data Release and Resource Sharing plan approved by Genome Canada. The project must remain current with internationally accepted standards for data release and resource sharing.

8. A publication policy which includes a commitment to comply with Genome Canada's policy on Access to Research Publications.

9. A commitment to acknowledge the contribution of the Government of Canada through Genome Canada and the lead Genome Centre, as well as all other relevant funders, in research publications, as well as all communications including press releases, posters and oral presentations. In addition, visual presentations such as seminars and websites must include the Genome Canada logo in compliance with Genome Canada's Brand Standards Guide.

10. Meet specific conditions or recommendations of the International Review Committee as detailed in the Notice of Award.

11. Meet other conditions established by Genome Canada.

8.3 Management of Funding

i. The agreement between Genome Canada and the Genome Centre will reference financial commitments from other persons as well as other financial requirements.

ii. As the needs and circumstances of each Centre, the researchers and partner organizations may differ, the contracts between these partners will be negotiated individually and need not be identical, but should apply the same general principles defined in the agreement between Genome Canada and the Genome Centres. Genome Canada's share of the funding for approved projects will flow from Genome Canada to the Centres. The Genome Centres will manage (e.g., disburse, monitor and report on) the funds for the project.

iii. If co-funding is secured by way of a binding agreement, and funds can be shown to be available to meet the co-funder's obligations, Genome Canada's contributions can be adjusted to accommodate the timing of the expected receipt of funds from co-funding partners. However, where co-funding sources are not secured, Genome Canada's contribution will be based on 50% of the approved quarterly budget up to the maximum amount approved by the Board.

iv. Genome Canada provides funding up to the approved quarterly contribution, a quarter "in advance", subject to receipt of quarterly reports of expenditures (from both Genome Canada and co-funding sources), including actuals to the previous quarter, estimates for the current quarter, and forecasts for the quarter of the advance. Subsequent quarterly advances may be adjusted to account for any unused funding.

v. The financial status of co-funding must be reported on a quarterly basis.

8.4 Accountability, Reporting and Performance Measurement

Funded projects must submit to their lead Genome Centre on a quarterly basis (or as required for a particular RFA), information and data as prescribed by the Centre in terms of timing, format and content, which will allow for the on-going assessment and monitoring of their performance. It is the responsibility of the lead research institution to ensure that the project leader(s) participate in this process. Funded projects must also agree to participate in and provide information for any evaluation-type activities that may be undertaken from time to time by Genome Canada or the Genome Centre, for up to five years subsequent to the end date of the project.

Genome Canada expects that all co-funding expenditures (domestic and international) be reported on a quarterly basis.

8.5 Management of Changes to Genome Canada Funded Projects

Over the term of a Genome Canada funded project, some adjustments can be expected to the initially approved project, because of required changes to the scientific, managerial or financial conditions of funding initially approved by Genome Canada. In order to manage these adjustments, funded Projects must follow the principles as outlined in Genome Canada's "Guidelines for the Management of Changes to Genome Canada Funded Projects".

8.6 Final Reports

Within three (3) months of the completion of the projects, each project will be required to submit to its Genome Centre a final report that includes a description of the accomplishments of the project relative to the approved objectives as well as a detailed financial report in a format as determined by Genome Canada. A percentage of the final payment will be held back pending receipt and approval of the Final Report.