GenomeCanada

Guidelines and Evaluation Criteria for Competition III

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Genome Canada
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Genome Canada is a not-for-profit corporation dedicated to developing and implementing a national strategy in genomics and proteomics research for the benefit of all Canadians. By means of **investments totalling $375 million** to date from the Government of Canada, Genome Canada has become the primary funding and information resource relating to genomics and proteomics in Canada and has established five Genome Centres across the country (Altantic, Québec, Ontario, Prairie and British Columbia).

1 OBJECTIVES OF GENOME CANADA

The overriding objective of Genome Canada is to support genomics and proteomics research to enable Canada to become a world leader in selected sectors that are of strategic importance to this country, such as health, agriculture, environment, forestry and fisheries.

In order to accomplish this objective, Genome Canada will:

1. Bring together industry, governments, universities, hospitals, research institutes and the public in support of the national genomics and proteomics research program.

2. Through five Genome Centres across Canada (one each in British Columbia, the Prairies, Ontario, Québec and the Atlantic provinces), provide leading-edge technologies to researchers and cross-disciplinary training of the necessary workforce in all genomics and proteomics-related fields.

3. Support large-scale genomics and proteomics projects that draw on existing Canadian strengths and expertise, and whose scale and scope are such that they cannot currently be funded at internationally competitive levels, through other existing mechanisms.

4. Put in place research infrastructure to support the major science and technology platforms (S&T platforms) essential for the large-scale projects including, but not limited to, functional genomics, proteomics, sequencing, genotyping, bioinformatics and new technology development.

5. Ensure leadership in ethical, environmental, economic, legal and social issues related to genomics and proteomics research (GE^3LS).

6. Effectively communicate the results of genomics and proteomics research to the public, thereby helping Canadians to understand the relative risks and rewards of this type of research.

7. Foster Canadian participation in international genomics and proteomics research programs.

8. Encourage investment in genomics and proteomics research by others.

9. Create and realize economic, industrial and social benefits to Canada.

2 BACKGROUND

Five Genome Centres, one for each of the identified regions (British Columbia, the Prairie region, Ontario, Québec, and the Atlantic region), were approved for funding in March 2001. The Centres have as their foundation, large-scale research projects and S&T platforms approved in three national competitions. **Contact information for each Centre is presented in Appendix A.**

Genome Canada has funded **79 large-scale** research projects and S&T platforms with a total investment to date of over **$800 million** with partner funding. A list of large-scale projects and S&T platforms approved for funding in each Centre is available on Genome Canada's web site at www.genomecanada.ca.

3 COMPETITION III

Genome Canada is currently finalizing its five-year strategic plan for submission to the Federal government for funding approval. Although there is currently no dedicated funding for Competition III, it is being initiated now in anticipation of Genome Canada receiving long-term stable funding. This will permit the attainment of maximum benefits from previous investments as well as allow excellent genomics and proteomics projects to begin as soon as possible once additional funding is secured.

Genome Canada is optimistic that funding will be secured by the time funds are required for the projects approved in Competition III. However, if Genome Canada is not successful in securing additional funding in a timely fashion, it may be necessary to delay or cancel Competition III.

Genome Canada will accept applications from Genome Centres for **large-scale research projects in genomics or proteomics** of three (3) or four (4) years in duration. Genome Canada is seeking proposals that are of such scale and scope that they cannot currently be funded at internationally competitive levels through other existing mechanisms. A proposal concerning the ethical, environmental, economic, legal and social aspects of genomics and proteomics research (GE^3LS) can be submitted either as a large-scale project or as a component of other projects (see 3.1 for details).

In order to maximize the effectiveness of Genome Canada to advance genomics and proteomics research in Canada, it may be desirable to provide opportunities for sharing of resources and expertise among Centres. It is possible that large-scale projects from one Centre may require the S&T platforms available in other Centres. It is also possible that researchers from across Canada, and from other countries, may collaborate on large-scale projects, sharing technology, knowledge, GE^3LS expertise and resources. Genome Canada will strongly encourage and support such arrangements, where desirable and feasible.

3.1 GE^{3}LS Issues

All applicants must consider the GE^{3}LS aspects of their proposed research and, where appropriate, seek advice from one or more GE^{3}LS experts (as a co-applicant, collaborator, or through membership on an advisory committee) to develop a plan to address those GE^{3}LS issues directly raised by the proposed research.

3.2 Social and/or Economic Benefits for Canada

Note that in this competition Genome Canada will place much greater emphasis on the potential ability of the proposed research to lead to social and/or economic benefits for Canada.

Applications must include a proposal for the transfer, dissemination, use or commercialisation (as appropriate) of the anticipated results of the research proposed. The plan should demonstrate how the research results will contribute to job creation and economic growth in Canada and their impact on society, quality of life, health, and the environment, as well as the creation of new policies in these areas. The plan must present specific objectives, milestones, expected outcomes, and the methods to be used to attain them.

The application must also include individuals with the appropriate expertise (e.g., public health administrators and policy experts, entrepreneurs, venture capitalists, economists, sociologists, market analysts, technology transfer experts, legal advisors, etc.) who will develop and implement the plan to realize the social and/or economic benefits of the research.

4 APPLICATION AND EVALUATION PROCEDURES

4.1 Requests for Support of Large-Scale Research Projects

Requests for support of large-scale research projects must be submitted to Genome Canada through a Genome Centre.

Eligible applicants, including researchers from industry, academic institutions, research institutes and government laboratories[1], interested in submitting applications for large-scale projects must first contact one of the five Genome Centres (see Appendix A). It is the responsibility of the Centre to determine which large-scale projects to put forward. For those that are put forward, the Centre must ensure each satisfies Genome Canada's evaluation criteria as defined in Appendix B.

If, at any time during the review process, it is determined that a proposal does not satisfy the evaluation criteria as defined in Appendix B, Genome Canada will NOT submit the proposal to peer review.

[1] Scientists working in Federal laboratories may be co-applicants on an application but may not receive Genome Canada funds. Funding for activities to be carried out in a Federal laboratory must come from other sources, with the exception of costs that are incurred based on a reasonable fee-for-service arrangement or contract.

4.1.1 Requirement for S&T Platforms

Each application for support of a large-scale project must include a detailed description of all technologies that will be required from new or existing S&T Platforms. Genome Canada-supported S&T platforms are established to provide technologies and expertise to the projects and avoid duplication of effort across the country. It is the responsibility of the Genome Centre, in collaboration with Genome Canada's Director of S&T Platforms, to work with the leaders of the large-scale projects to determine the technologies required and how best to satisfy these requirements through use of the S&T platforms. The request for services must be described in the research proposal, as well as on the *Services from S&T Platforms* sheet in the budget form. The application must include a letter from the S&T Platform administration in support of the request, including a description of the service(s) to be provided, unit costs, number of units required, personnel requirements, data analysis requirements, etc. Only those projects satisfying these criteria will be considered in the evaluation of a Centre's request for establishment of a new platform or increasing the capacity of an existing S&T platform. For information on the Genome Canada-supported S&T platforms refer to the Genome Canada website www.genomecanada.ca.

4.1.2 Data Management

Each application must provide a plan for handling the scientific data (bioinformatics, statistical analysis, data release and publication). The bioinformatics plan must include a diagram showing the data flow for the information created by all project components and a description of the data flow. The data flow has to reflect the workflow in the overall project. In addition, a description of the computer analysis strategies for the data, the long-term preservation (archiving) of the raw data and analysis results, as well as the strategy for data exchange within the project and with the scientific community (after protection and publication of the intellectual property) must be provided. Projects dealing with ethically sensitive data also need to identify their strategy for the secure handling of sensitive information, such as patient data. For the development of this section of the proposal applicants should seek input from the Director of a Genome Centre Bioinformatics Platform.

4.1.3 Commercialization and Benefit Sharing

A clear commercialization process, which includes IP management and ownership, technology transfer and benefit sharing, must be defined and included in the full application (i.e., not required at the registration stage). In anticipation of a successful outcome, the Genome Centre, potential host organization(s) and co-funding partner(s) should outline general terms that deal with the sharing of future benefits (e.g., equity, royalties, and repayment options, etc.) commensurate with the contributions of the respective parties.

4.2 Request for Support of Science & Technology Platforms

Following the announcement of the results of Competition III in July 2005 (for large-scale projects), requests for funding of new S&T Platforms and for expansion of previously funded Genome Canada S&T Platforms may be submitted. Consideration will only be given to requests to fund platforms to the extent that they are needed to provide services to projects approved for funding in Competition III, and the services required must have been explicitly requested in the budget of the project (refer to Section 4.1.1).

Prior to the July 2005 announcement of Competition III results the Genome Centres and Genome Canada's Director of S&T Platforms will coordinate the development of the requests for platform funding. Platform leaders should work closely with applicants across the country as full applications are being prepared. Platform leaders should inform applicants about the types of services available, unit costs for services, the scale and scope of large-scale data analyses required, and any other advice needed to incorporate platform services into an application.

Guidelines and application instructions for S&T platform funding will be provided to the Genome Centres shortly after full applications for Competition III have been received in January 2005.

4.3 Genome Canada Time Lines

Please note that each Genome Centre will have its own time line. Important dates in a Centre's time line will be on or before the Genome Canada dates outlined below. Contact the Genome Centres for their time lines.

July 30, 2004	Release of guidelines
November 1, 2004	Registration receipt date
November 15, 2004	Invite full applications
January 28, 2005	Receipt of full applications
February & March 2005	Due Diligence Review
March 2005	Board decision on Due Diligence Review
early June 2005	Peer Review Panel meeting
late June 2005	Board decision on funding
July 2005	Notification of Decision

4.4 Registration- November 1, 2004

By **November 1, 2004**, each Genome Centre must register the intent to submit applications for funding to Genome Canada. Each application must be registered on the form available at www.genomecanada.ca.

Applications submitted to Genome Canada in the absence of the support of one of the Genome Centres, (i.e., signature of the President & CEO) will NOT be accepted by Genome Canada.

If it is determined at the registration stage that a proposal does not satisfy Genome Canada's evaluation criteria as described in Appendix B a full application will NOT be invited. It is the responsibility of each Genome Centre to undertake an initial review of eligibility of each proposal. The registration process will also provide guidance to Genome Canada in the selection of reviewers for the peer review process.

The Centres may work together to identify areas of potential synergy between applications from researchers across the country.

4.5 Full Application – January 28, 2005

An application for funding of a large-scale project must be received from the Genome Centre by Genome Canada on or before **January 28, 2005.** The application must be presented on the form to be made available at www.genomecanada.ca and must address the evaluation criteria described in Appendix B.

4.5.1 Due Diligence Review

Genome Canada and its designated consultants will perform a review of the financial and management aspects of the proposed projects, taking into consideration the evaluation criteria described in Appendix B. The Due Diligence Review will include a face-to-face meeting with the applicants, the co-funders and the Genome Centre representatives. The Due Diligence Committee will offer recommendations and advice to the Board of Directors of Genome Canada. The Board of Directors will make the final decision, before March 31, 2005, as to which proposals will be submitted to peer review.

Proposals that do not satisfy the established criteria for financial and management requirements will NOT be submitted for peer review.

Following the Due Diligence Review decision, the applicants will be provided with written comments. Information obtained during the Due Diligence Review of proposals to be submitted for peer review, will be provided to the review panel to assist them in their evaluation.

4.5.2 Peer Review

A multidisciplinary panel of international experts will meet in June 2005 to review the full applications. To assist the panel, written reports will be solicited from external peer reviewers for each proposal and forwarded to the panel members in advance of their meeting. Information obtained from the Due Diligence Review will also be available to the review panel in advance of its meeting. The panel will evaluate each application taking into consideration the evaluation criteria presented in Appendix B.

There will be an opportunity for applicants to have a face-to-face meeting with the panel to discuss various aspects of the proposal.

The review panel will offer recommendations and advice, including budget recommendations, to the Board of Directors of Genome Canada. The Board of Directors will make the final decision on funding for each proposal before June 30, 2005. Following the decision, applicants will be provided with a written evaluation of the strengths and weaknesses of their application.

Genome Canada may adjust the evaluation process where warranted by the complexity of the proposals or other relevant factors.

5 SCIENTIFIC ADVISORY BOARD (SAB)

All Genome Canada funded projects must have a Scientific Advisory Board to provide advice and guidance to the research team. It is the responsibility of the Genome Centres to ensure that SABs are constituted in such a manner that they are sufficiently independent of the research team and able to provide informed and critical advice to the investigators.

6 INTERIM REVIEW OF PROGRESS

Genome Canada will undertake an interim review of each approved project, within approximately two years from the date of the Notice of Award by Genome Canada, in order to evaluate the progress of the research, the exploitation of the social and/or economic benefits for Canada, and the financial and management aspects of the project, to determine whether funding should be continued, reduced or terminated.

Each project leader will submit a progress report through their Genome Centre, which will be reviewed by Genome Canada's International Science Review Committee (ISRC). The ISRC will provide a detailed evaluation of a project's progress and provide feedback and advice to the Genome Centre, the Project Leader(s) and the lead organization.

As part of the interim review, there will be a face-to-face meeting between the ISRC and project representatives. Representatives from the Genome Centre, as well as other major stakeholders, may also be present during the interim review meeting. The evaluations of the ISRC, as well as their recommendations, will be submitted to the Board of Directors of Genome Canada for consideration. The Board will make the final decision on whether or not to continue funding a project.

7 FUNDING

Genome Canada will fund up to 50% of approved eligible costs for new or incremental research activities that are an integral part of the Genome Canada approved project. Applicants must assist their Genome Centre, which will take the lead in securing the remaining 50% of the funding from other eligible sources.

7.1 Eligible Costs

Eligible costs are defined as reasonable and incremental 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 was specifically made to support the Genome Canada project.

Eligible costs may include the following:

i. Salaries:
   - salaries and benefits for researchers, trainees, technicians, management (e.g., project managers) and support staff needed for the operation of the research infrastructure (note that salaries of researchers or senior management who are currently funded by their respective organizations are **not** considered eligible costs)
   - the actual cost of release time from teaching or clinical responsibilities, if supported by a letter from the host institution;

ii. operating costs;

iii. costs related to the general maintenance of research infrastructure, to be used for carrying out the proposed research;

iv. support for research into GE^3LS aspects of the research;

v. costs related to the development and implementation of the plan to realize social and/or economic benefits for Canada;

vi. costs for the communications and public outreach activities related to the project;

vii. research infrastructure within Canada. As defined in the *Funding Agreement between Genome Canada and the Government of Canada*, research infrastructure means equipment, specimens, scientific collections, computer hardware or software, information databases, communications linkages and intangible property used or to be used primarily for carrying on the research, including housing and installations essential for the use and servicing of the items listed above. This includes reasonable rental and renovation costs for existing buildings and facilities, or costs for new buildings and facilities, essential for the use of those items listed above. The opportunity cost of using existing infrastructure may **not** be included as an eligible cost;

viii. reasonable and low administrative costs (including project-related costs of developing and fostering partnerships and relationships between the Genome Centre and host organization, which are to be managed by the Genome Centre). Administrative costs must not exceed five percent (5%) of the budget (calculated as total budget less admin. costs). Note that salaries for project management are eligible costs under (i) above; and

ix. inflation rate costs:

- inflation for salaries, not to exceed two percent (2%) of total salary and benefits, for salary expenditures in years 2 to 4 of the project;
- note that inflation rate cannot be applied to consumables, equipment, general & administrative or services from S&T platforms.

Payments to foreign persons, for example investigators' salaries, are not considered eligible costs for Genome Canada, however, costs that are incurred based on a reasonable fee-for-service arrangement or contract are considered eligible.

7.2 Co-funding

Genome Canada requires that at least 50% of the requested funding for eligible costs must be obtained through co-funding from other sources. A co-funding plan must be provided, which includes either a firm commitment for at least 50% of the requested funding for eligible costs of the project, from other sources, or a well-developed and feasible plan for securing such funding. Those applications not meeting this criterion, as determined during the Due Diligence Review, will **NOT** be submitted for peer review.

The full application must include complete documentation for secured or proposed co-funding. Examples of appropriate documentation include:

- Written confirmation, for example a letter or a copy of an agreement from the co-funding source, committing funds. Acknowledgement of the use of these funds to co-fund the Genome Canada project must also be included.

- For co-funding from a funding agency, a copy of the application cover page, research summary, detailed budget and notice of award (if applicable). Note that documentation must clearly demonstrate that funding is being used for eligible costs included in the budget of the Genome Canada approved project.

- For co-funding from an industry source:
    - a copy of a Board resolution specifying the company's level and terms of commitment
    - provide documentation to support the financial viability of the company and its ability to fulfill its commitment to the project (e.g., a cash flow statement, a recent audited financial statement, a press release announcing significant new funding, etc.)

- For in-kind contributions: a clear rationale and calculation of how the value was determined (including documentation to support all assumptions, price lists, discount policy, quotes from suppliers, letters supporting same, etc.)

7.2.1 Eligible Co-funding

i. Co-funding must be applied for on or after April 1, 2004 and be for eligible costs specifically requested in the Genome Canada budget in order to be eligible for the purpose of this competition.

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. There are exceptions. The following agencies are **NOT** considered as eligible co-funding sources: Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council, Social Sciences and Humanities Research Council, and tri-council programs (e.g., the Networks of Centres of Excellence 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;
- 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);

- In the case of supplier discounts, amounts will be considered as eligible co-funding if:
    - The amount is above and beyond the standard industry or academic discount; and
    - The amount can be supported by documentation from the supplier's head office (i.e., a letter from a sales representative will not be acceptable).

iv. The value of previously existing IP transferred to a project is NOT considered eligible co-funding unless it is a contribution by a supplier of IP (e.g., 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.

8 ADMINISTRATION

8.1 Conditions for Release of Genome Canada Funds

The following are the minimum requirements to allow for the disbursement of Genome Canada's quarterly contributions:

i. Signed agreement between Genome Canada and the Genome Centre.

ii. Signed agreements (or MOUs) between the Genome Centre, the lead organization, the researchers and the co-funding partners that established the resolution of major areas, such as, contributions, IP ownership and management, data release, a commercialization process, project management, the role of the SAB, funding term, termination policy, financial policies, etc. The agreements or MOUs must be in compliance with the agreement between Genome Canada, the Genome Centre, and third party funders, if applicable.

iii. Revised budget and milestones, in accordance with the recommendations of the review panel as approved by the Board of Directors of Genome Canada.

iv. Appropriate certification for proposals performing research involving human subjects, human stem cells, animals, biohazards, radioactive materials or possible effects on the environment.

v. A clearly defined policy and plan for data release, sharing of resources created by the project and publication of results.

vi. A well-developed and feasible co-funding plan that clearly defines source, amount, timing and justification for eligibility, and is supported by appropriate documentation.

vii. Meet other conditions that may be set by the Board of Directors of Genome Canada.

8.2 Project Readiness

All applicants must demonstrate that they will be in a position to receive Genome Canada funding within six (6) months from notification of approval (see Conditions to Release Genome

Canada Funds, Section 8.1). **Genome Canada reserves the right to withdraw its funding for any approved project that is not ready to receive funding, or for which signed agreements have not been secured, within six months from notification of approval.**

8.3 Management of Funding

i. The agreement between Genome Canada and the Genome Centre will reference financial commitments from other persons, and specify cash flow statements, expected outcomes, comparative benchmarks and monitoring programs.

ii. As the needs and circumstances of each Centre, the researchers and partner organizations differ; the contracts between these partners will be negotiated individually and need not be identical, but should apply the same general underlying principles as 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 will provide funding up to the approved quarterly contribution, a quarter "in advance". Subsequent quarterly advances may be adjusted to account for any unused funding.

8.4 Accountability and Reporting

Each Centre must fulfil the evaluation, audit, accountability and reporting requirements established by Genome Canada, including the provision of information necessary to enable Genome Canada to assess the ongoing performance of the Centre and its activities. It is the responsibility of the investigators leading the large-scale projects and S&T platforms funded by the Centre to participate in this process. As part of its accountability process, Genome Canada requires each Centre to put in place mechanisms to assess the ongoing performance of the projects and platforms in order to determine from time to time whether funding for a project or platform should be continued, reduced, suspended or cancelled.

Should any additional requirements or restrictions be placed on new funds received for this competition, Genome Canada will be obliged to ensure that the contracts between Genome Canada and the Genome Centres reflect these conditions and that the guidelines for this competition are modified, where necessary, to allow compliance with them.

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APPENDIX A - GENOME CENTRE CONTACTS

British Columbia	Don Riddle Chief Scientific Officer tel: (604) 637-4388 driddle@genomebc.ca www.genomebc.ca
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Ontario	Suzanne Gill Director of Research Programs tel: (416) 977-9582 ext 273 sgill@ontariogenomics.ca www.ontariogenomics.ca
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APPENDIX B - EVALUATION CRITERIA

To ensure that the objectives of Genome Canada are met, proposals are assessed against the following five criteria. A threshold of excellence must be exceeded for each criterion. The descriptors following each criterion are not all-inclusive.

A Broad Criteria of Eligibility

1. Genomics or proteomics focus of the research.

2. Of such scale and scope that it could not currently be funded at internationally competitive levels through other existing mechanisms.

3. In an area identified as strategic to Canada (e.g., health, environment, forestry, fisheries, agriculture and GE^{3}LS).

B Scientific Criteria

1. Scientific excellence of the proposed research as affirmed by peer review; demonstration that the project is coordinated, integrated and inclusive; importance and/or originality of the questions posed and expected results; appropriateness of the methods and the proposed analyses of data; appropriateness of the discussion of anticipated difficulties and consideration of alternatives; and demonstration of the way in which the proposed research fits into the international genomics or proteomics research picture (i.e., is it “cutting edge” genomics or proteomics research?).

2. Feasibility of the milestones and proposed objectives and goals.

3. The quality and experience of the applicants affiliated with the proposal: the appropriateness of the training and/or track record of the applicant(s) for the proposed research, in particular, prior contributions to the field of genomics or proteomics research; the importance and originality of the recent productivity of the applicant(s), especially with regards to genomics or proteomics-related problems; and the level of confidence in the ability of the applicant(s) to do the work proposed.

4. The quality of the plan for the handling of the scientific data (bioinformatics, statistical analysis, data release, publication) and sharing of resources created by the project.

5. Demonstration that research to be carried out builds on existing Canadian strengths and expertise in genomics or proteomics research and/or targets a unique Canadian niche.

6. Demonstration of international research collaborations.

7. The relevance and impact of anticipated results internationally. Will the research enable Canada to become a world leader? How does it compare to research being conducted elsewhere?

8. For projects that have ethical, environmental, economic, legal or social implications, the quality and appropriateness of the plan to address these issues.

9. The potential for research training: excellence of the training program and appropriateness of the training environment to ensure that a sufficient quantity of highly skilled researchers and technicians are available to fuel the demands in genomics or proteomics for the next decade.

10. The quality of the scientific environment in which the work will be done.

11. The extent to which the research proposed will increase the productivity of genomics or proteomics research, and enhance the development of new methods, perspectives and technology to improve Canada's capacity for innovation.

C Social and/or Economic Benefits

1. The quality of the plan for the transfer, dissemination, use or commercialisation (as appropriate) of the anticipated results of the research proposed. Demonstration of how the research results will contribute to job creation and economic growth in Canada and their impact on society, quality of life, health, and the environment, including the creation of new policies in these areas.
2. The appropriateness of the team of experts (e.g., public health administrators and policy experts, entrepreneurs, venture capitalists, economists, sociologists, market analysts, technology transfer experts, and legal advisors, etc.) who will develop and implement the plan to realize the social and/or economic benefits of the research.

D Financial Criteria

1. Budget/Control Processes

i. The budgeted costs meet the definition of Eligible Costs (Section 7.1).

ii. The budgeted costs are aligned with the proposed research plan and activities, and the relationship between the proposed costs and potential benefits of the research proposed is evident.

iii. The reasonableness of a project's budgeted costs.

iv. The plausibility of the justifications provided for budget items.

v. The effectiveness of financial and budgetary control processes or mechanisms, (e.g., processes for authorizing purchases, payments and budget adjustments).

vi. The costs associated with the ramp-up period are reasonable in relation to recruiting, purchasing and installing new equipment, space requirements, and renovations.

vii. The quality of the documentation and principal financial assumptions, which support the proposed budget.

2. Co-Funding

i. The proposed co-funding plan complies with the Eligible Co-funding guidelines provided in Sections 7.2 and 7.2.1.

ii. The feasibility of the co-funding plan, that is, the ability to secure co-funding for eligible costs of the research from other sources. This may be in the form of a commitment to co-fund or a plan for securing such funding.

iii. The supporting documentation made available, which may include letters of commitment or signed agreements by co-funding sources, quotes from suppliers, grant applications to other funding agencies, or confirmation of grants received.

iv. The demonstrated relationship between the proposed co-funding and the objectives of the project.

E Management Criteria

1. The appropriateness and quality of the management plan, including the effectiveness of the administrative and organizational management structure which addresses, for example, the following:

   i. The project management plan and accountabilities;

   ii. The mechanisms for communicating within the project, with the Genome Centre(s) and with collaborators and partners;

   iii. How research results are made accessible, communicated and transferred to project participants and the scientific community;

   iv. The management abilities of the proposed team;

   v. The plan to recruit key personnel;

   vi. The role of key personnel and committees;

   vii. The frequency of meetings.

2. The appropriateness of the S&T platform(s) and/or other technologies chosen to support the project and the effectiveness of the arrangements made with S&T platform management.

3. The quality of the plans for making critical decisions or choices about the overall research direction, for example:

   i. The mechanism for making go/no-go decisions;

   ii. The evaluation of research progress, including the appropriateness and effectiveness of the Scientific Advisory Board;

   iii. The responsibility for making strategic decisions when a consensus is not reached;

iv. The discussion of key challenges/roadblocks and plans to address those issues, etc.

4. The strategies and implementation plan for forming partnerships and coordinating with relevant organizations (industry, governments, universities, hospitals and research institutes) and individuals, regionally, nationally and internationally.

5. The effectiveness of the plan for deployment of human resources, equipment and infrastructure, including the initial ramp-up period.

6. A plan that summarizes the strategy for communication, outreach and knowledge dissemination to the public. The plan should include an overview of media relations and public outreach and education activities, such as, participation in public forums and presentations to high school students, as well as promotional activities (including advertising and web site).

7. For projects where there is commercial potential:

   i. The strategy for commercialisation, technology transfer and handling of intellectual property issues;

   ii. An IP policy in place or in draft form, which addresses, for example:

   - Management versus ownership;
   - The sharing of benefits with the researchers, host-organizations, co-funders and the Centres;
   - The expected outputs in terms of publications and patents filed;
   - The protection and dissemination of valuable scientific data/data release policy; and
   - Costs of patent filing and protection;

   iii. The reasonableness of the proposed general terms that deal with the sharing of future benefits amongst the researchers, participating organizations, co-funding partners and the Genome Centres.