

Sector Innovation Program Program Guidelines

1. Introduction and Background

Genome British Columbia (Genome BC) leads genomics innovation on Canada's West Coast and facilitates the integration of genomics into society. Genomics¹ is the science that aims to decipher and understand the entire genetic information of an organism. Genome BC aims to encourage genomics research which can provide social, environmental, and/or economic benefits to the citizens of British Columbia. A recognized catalyst for government and industry, Genome BC invests in research to address challenges in key sectors: health, forestry, agriculture and agri-foods, fisheries and aquaculture, mining, energy and the environment. Examples of research projects supported by Genome BC can be found at: <http://www.genomebc.ca/research-programs/projects/>.

As part of its Strategic Plan, Genome BC plans to invest in projects that will provide genomic solutions to enhance sector competitiveness and sustainability. The goal of the Sector Innovation Program is to support projects that address the needs or challenges of each key sector and have the potential to generate social, environmental and economic benefits for BC in the future.

2. Program Objective

The Sector Innovation Program (SIP) aims to support genomic research of strategic importance which has the long-term potential to address the needs and challenges of key sectors in BC's economy and society.

3. Program Parameters

Genome BC has committed an investment of \$4M to the SIP program, and plans to allocate funds as necessary to the program once such funds become available. Genome BC plans to run multiple intakes per year and limit the investment for each intake to ensure that funds are available for subsequent intakes.

Each SIP intake will have a strategic focus, such as targeting particular sector(s) or a specific theme (e.g. climate change). Applications to SIP will only be open to projects which address the strategic focus of a particular intake.

The specific program parameters may vary depending on the focus for a particular intake. For example, the maximum project budget size may be lower for a specific depending on the circumstances.

The general program parameters are as follows:

- Co-funding (matching funds) is not required;

¹ The term genomics is defined here as the comprehensive study 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 ease of reference, it includes related disciplines such as bioinformatics, epigenomics, metabolomics, metagenomics, proteomics and transcriptomics.

- The allowable project budget range is \$75,000 to \$250,000, but this may vary for a particular intake;
- The allowable project term range is 12 to 24 months, but this may vary for a particular intake.

NOTE: Refer to the intake-specific info sheet for the focus and any intake-specific parameters or additional eligibility criteria for a particular SIP intake. Info sheets are available on the Genome BC website (www.genomebc.ca) or by contacting Genome BC at sip@genomebc.ca.

4. Eligibility

In order to be eligible for the SIP program, applicants must demonstrate the following:

- The project clearly responds to the focus (i.e. targeted theme or sectors of interest) of the SIP intake;
- The project responds to the objective of this program;
- The project plans to employ genomics to achieve the project objectives;
- The project meets the parameters for projects in this program and for the particular SIP intake;
- The Project Leader is an academic researcher based at one of the following types of BC institutions: (1) post-secondary institutions or their affiliated hospitals or research institutes; (2) laboratories of federal government departments or agencies², including regional health authorities; or (3) non-governmental, not-for-profit organizations (including community or charitable organizations) with an explicit research or knowledge translation mandate;
- The Project Leader is not currently leading an active project funded through the SIP program; and
- The Project Leader³ is not listed in that role on more than one Statement of Interest (SOI) for a SIP project/application to a particular intake.

NOTE: Refer to the intake-specific info sheet for the focus and any intake-specific parameters or additional eligibility criteria for a particular SIP intake. Info sheets are available on the Genome BC website (www.genomebc.ca) or by contacting Genome BC at sip@genomebc.ca.

5. Application Process

There is a two-stage application process for this program:

1. Statement of Interest (SOI) outlining the scope of the proposed project to assess its eligibility and help identify reviewers; and
2. Application providing full details of the research plan with an accompanying budget.

Statements of Interest and applications must be submitted directly to Genome BC through the following email address: sip@genomebc.ca.

Statement of Interest

The Statement of Interest (SOI) must provide a brief outline of the proposed project which addresses the eligibility criteria for SIP. A SOI template is available on the Genome BC website

² Researchers at BC Provincial government labs are not eligible for this program since Genome BC funds cannot flow to BC Provincial government organizations.

³ A Researcher may not submit more than one SOI where they are listed as the Project Leader to a particular intake. However, they may be involved in more than one project in different roles. For example, as co-project leader or co-applicant.

(www.genomebc.ca) or by contacting Genome BC at sip@genomebc.ca. SOIs must be submitted to Genome BC by the deadline posted by Genome BC to be considered for a particular intake. The SOI deadline will be approximately 6 weeks before the application deadline. Check the intake-specific info sheet for the exact timeline of a particular intake.

Statements of Interest will be reviewed by Genome BC to determine their eligibility to the program.

Application

Instructions for submitting applications are available in the *Sector Innovation Program - Application Form*, which will be available on the Genome BC website and must be used. Detailed explanations of each application section are included with the form. Applications must address the evaluation criteria described in Appendix 1 of these Program Guidelines.

A companion Sector Innovation Program Excel budget must be provided for the project. The template will also be available on the Genome BC website. Financial Guidelines are described in Appendix 2 of these Program Guidelines.

Review Process and Outcomes

Applications will be assessed against the evaluation criteria described in Appendix 1 of these Program Guidelines. Each application will be sent for external written review by reviewers with expertise relevant to the application. Financial due diligence reviews will be conducted by Genome BC. The final ranking will be made by a Review Panel composed of members with a relevant breadth of expertise including genome sciences, assessing social or economic benefits, and expertise in the particular sector or theme of interest to the intake. Final funding recommendations will be made by Genome BC and approved by Genome BC's Board of Directors. Genome BC reserves the right to modify the review process to accommodate the number of applications and ensure that the evaluation criteria are followed and program goals are met. Following the full decision process, all applicants, whether recommended for funding or not, will be provided with the external written reviews of their application.

Genome BC plans to limit the investment in each intake to ensure that sufficient funds are available for the following SIP intake(s). If an intake covers more than one sector, Genome BC may choose to fund projects in multiple sectors to meet our strategic objectives, provided that all approved projects meet the evaluation criteria and merit funding.

Successful applicants will receive a Notice of Results with conditions that must be met prior to project launch. Project-specific conditions may include changes to budget, research plan or Gantt chart. For example, certain activities or items may need to be removed if the costs are deemed ineligible or the activity is not well-aligned to the project objectives.

The decision of Genome BC regarding any project is final and appeals will not be considered. Applicants who are not funded on a given project are not precluded from submitting new project proposals to the program as applicable.

Evaluation Criteria

To ensure that the objective of the Sector Innovation Program is met, applications will be evaluated on each of the following major criteria, which are regarded as equally important:

- A. Strategic importance to the sector(s):
 - o Economic, social and/or environmental benefits to BC;
 - o Demonstrated sector need for the outcomes of this research; and
 - o Ability of the project team to advance the research towards sector uptake or implementation;
- B. Research, management and financial feasibility

A description of each criterion can be found in Appendix 1 of this document. Financial Guidelines are described in Appendix 2.

Timelines

Genome BC plans to run multiple intakes a year but the schedule may vary. Please refer to Genome BC's website for intake-specific info sheets outlining the exact timelines for each intake.

6. Administration Following Notice of Results

The plan for disbursement of approved funds will be determined based on the specific needs of the project. The first disbursement of funds will flow to projects once all conditions for the release of funds have been met as detailed in the Notice of Results.

Funded projects will be required to provide Genome BC with financial reports after 1 year and at the end of the project. A research report will be required at the end of the project. *Genome BC reserves the right to hold back a portion of funding until receipt and approval of the final report.*

7. Genome British Columbia Contact

Interested researchers are encouraged to contact Genome BC at sip@genomebc.ca at their earliest opportunity with any questions or for clarification of any aspects of these program guidelines or the intake-specific info sheet(s). Further information is available on the Genome BC website (www.genomebc.ca).

Appendix 1. Evaluation Criteria and Guidelines

See the application form for a description of the required contents for each section. Reviewers will be asked to interpret the evaluation criteria at a level appropriate to the scale and type of project proposed.

To ensure that the objective of the Sector Innovation Program is met, applications will be evaluated on each of the following major criteria, which are regarded as equally important:

- A. Strategic importance to the sector(s) aligned to:
 - o Economic, social and/or environmental benefits to BC;
 - o Demonstrated sector need for the outcomes of this research; and
 - o Ability of the project team to advance the research towards sector uptake or implementation;
- B. Research, management and financial feasibility

Note that Genome BC plans to limit the investment in each intake to ensure that sufficient funds are available for subsequent intakes. Refer to the intake-specific info sheet for details on the funding envelope for that intake. If an intake covers more than one sector, Genome BC may choose to fund projects in multiple sectors to meet our strategic objectives, provided that all approved projects meet the evaluation criteria and merit funding.

A. Strategic importance to the sector(s)

1. How convincing is the argument that the project deliverables are of strategic importance to the sector or target area of interest?
2. Are the deliverables realistic and achievable?
3. Are the potential economic, social and/or environmental benefits of this research well-described and reasonable?
4. How significant are the potential benefits of this research in terms of impact on the sector or target area of interest?
5. Have the potential users of the outcomes of this project been identified?
6. How will this project position the applicants to advance this research if the project is successful? For example, follow-on projects, partnerships with key sector users, collaborations etc.

B. Research, Management and Financial Feasibility

Research

1. How will genomics be used to realize the proposed objectives?
2. Are the major activities consistent between the research plan, budget and Gantt chart?
3. Do the proposed activities have specific, measurable scientific objectives that will support the project deliverables?
4. Are the proposed objectives, goals, milestones and critical path feasible? Milestones must be constructed so as to provide objective, quantifiable measures of success and should be realistically attainable during the proposed timeframe.
5. How suitable are the available resources, facilities and equipment?
6. Are the design, methods and analysis adequately developed, well integrated, and appropriate to the aims of the project?
7. Does the project include links to collaborators that are essential to the success of the project?
8. How appropriate are the plans for handling the research data and biological resources (data protection, release and publication, resource sharing, etc.)?

9. If proposing analysis of samples that are subject to seasonal availability, does the team have access to existing samples or ability to complete sample collection very early in the project?

Management

10. How appropriate is the expertise and time commitment of the research team in terms of realizing the research goals?
11. Does the project team have demonstrated leadership, research experience and subject knowledge, particularly in this type of research initiative?
12. How well does the management plan cover project governance, accountabilities of personnel, and processes for decision-making on research direction?
13. Has the team clearly demonstrated how they will make the research results accessible to the research community, when intellectual property protection is not a concern? For example, has the team defined data repositories to share data?

Financial

13. Do the budgeted costs comply with the eligible costs outlined in the Financial Guidelines (Appendix 2)?
14. Are the budgeted costs aligned with the proposed research plan and activities?
15. Is there a clear relationship between the costs and proposed benefits of the project?
16. How effective are the financial and budgetary control processes?
17. Do the documentation and principal financial assumptions support the proposed budget?
18. Are all of the costs allocated to Genome BC incurred and paid for in the Province of BC? Costs incurred in BC utilizing fee-for-service providers located outside of the Province are eligible, but quotes and justification must be provided.

APPENDIX 2. FINANCIAL GUIDELINES

Eligible costs are defined as reasonable and new costs for items that directly support the objectives of the Genome BC approved project. Genome BC funds cannot be used to cover overhead costs.

Note that Genome BC funds cannot flow to a company or to a BC Provincial government laboratory unless they are providing the work on a Fee-for-Service basis (see Services from Others).

The main categories of eligible costs are 1) Salaries and benefits, 2) Consumables, 3) Services from Others, 4) General and Administrative costs and 5) Equipment.

Eligible costs may include the following:

1. Salaries and benefits:
 - a. Salaries for team members, apart from Project Leader or Co-leaders, who do not hold existing, ongoing or permanent salaried positions through their institution. Salaries must be shown to be new and incremental, and represent at least 0.15 FTE per year.
 - b. Benefit rate as charged by the host institution, not to exceed 20% of the employee's salary per year.
 - c. Salaries to support administration and co-ordination of the project, such as a Project Manager, to a maximum of \$5,000 per year (pro-rated for partial years) in total costs for small-scale (\$250k and under) projects. These costs cannot exceed more than 5% of the total budget.
2. Consumables:
 - a. Materials and supplies consumed as part of the research, such as laboratory reagents and supplies (e.g. microtitre plates, pipette tips, kits, reagents). For consumables utilized in most laboratories, a general rate per Full Time Equivalent (FTE) may be accepted, provided that the rate is appropriately justified in the supporting documentation.
 - b. Items that meet at least one of the following; 1) expendable tangible property, 2) useful life of 1 year or less, or 3) a cost of less than \$2000. For example, a \$2000 piece of equipment, such as a laptop, would be considered a consumable cost.
 - c. Travel for research activities (e.g. sample collection).
 - d. Equipment service contracts, provided that the need for the use of the equipment is justified.
3. Services from Others:
 - a. External costs that are incurred based on a reasonable fee-for-service arrangement or contract.
 - b. Costs related to Intellectual Property protection services, such as patent registration, filing, and maintenance costs incurred during the term of the project, as long as the service is provided by a company external to the host institution.
 - c. A copy of a quote or Statement of Work (SOW) must be provided to support any individual cost that exceeds \$15,000.
 - d. Genome BC strongly recommends the use of service providers based in BC. The use of out-of-province or out-of-country service providers must be justified in the appropriate section of the application.
4. General and Administrative (G&A):

- a. Reasonable and low general and administrative (G&A) costs directly linked to the project. For example, travel costs that are not directly related to the research activities (e.g. travel to conferences and meetings), costs for the project's communications and public outreach activities, and costs associated with scholarly publications, including fees to provide open access to the findings (e.g. costs of publishing in an open access journal or making a journal article open access).
 - b. G&A costs must not exceed five percent (5%) of the non-administrative costs of the project budget (calculated as total budget less administrative costs).
5. Equipment:
- a. 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) non-expendable tangible property, 2) having a useful life of more than 1 year, and 3) a cost of \$2,000 or more.
 - b. A strong justification for the need to purchase equipment for a Genome BC project must be provided.
 - c. Any items of equipment over \$15,000 require a copy of a quote to be provided with the application.

Ineligible costs include, but may not be limited to:

- Indirect costs to the project, such as institutional overhead costs applied to funds from partners.
- The opportunity cost of using existing infrastructure.

Genome BC will conduct a financial due diligence review as part of the review process to assess if costs are eligible and well-justified.