

Societal Issues Round 4

Request for Applications

Expanding Genomics Testing: A Call for Qualitative Researchers to Address Local Challenges

1. INTRODUCTION AND BACKGROUND

Genome BC is a not-for-profit organization that has advanced genomics research and innovation for nearly 25 years, growing a world-class life sciences sector in BC and delivering sustainable benefits for British Columbia, Canada and beyond. Genome BC has attracted over \$1 billion in direct co-investment to the province, which has contributed to funding more than 550 genomics research and innovation projects. These initiatives enhance healthcare and address environmental and natural resource challenges, improving the lives of British Columbians. Genome BC also integrates genomics into society by supporting responsible research and innovation and fostering an understanding and appreciation of the life sciences among educators, students and the public. Please visit www.genomebc.ca for more information.

Through previous rounds of the Societal Issues program, Genome BC has supported a variety of Genomics and Society (G&S) projects, led by SSH¹ researchers, that explored societal issues emerging from genomics-based² innovations and challenges for adoption. These complement the wider knowledge in the Genomics and Society space. Identified genomics adoption challenges in healthcare include:

- Lack of awareness: Both patients and clinicians need better education about genomic medicine options
- Communication gaps: Patients may not receive culturally appropriate information or understand their options for testing
- Equity of access: Socioeconomic and other factors can limit access to testing
- Addressing distrust: Indigenous peoples and marginalised groups often have a history of being exploited in research, leading to a lack of trust in the scientific community

¹ The acronym SSH+ refers to the “social sciences, humanities and related areas of study”. It encompasses all disciplines that use analytical, critical, speculative, or empirical methods to investigate the human condition, human behaviour and society. The “+” includes disciplines such as environmental and information sciences that might not otherwise be included under SSH.

² Genomics is the science that aims to decipher and understand the entire genetic information of an organism (i.e. plants, animals, humans, viruses and microorganisms) encoded in DNA and corresponding complements such as RNA, proteins and metabolites. Broadly speaking, this definition includes related disciplines such as bioinformatics, metabolomics (the study of the metabolite pools of an organism), proteomics (the study of the full or partial set of proteins encoded by a genome) and related areas of research. Surrounding these biological systems, social sciences and humanities research is essential.

This intake is an opportunity for social scientists and other health researchers to explore and test countermeasures to local challenges of adopting genomics testing in BC's healthcare system. **SOC4 is open to any researcher exploring a qualitative research question.** Since these challenges are complex and do not have simple solutions, this intake focuses on developing countermeasures to tackle current challenges. The aim is to increase adoption while appreciating many systemic challenges will still exist. We are open to supporting projects of varying sizes, both big and small. It is expected the project's budget needs will be commensurate with the scope of countermeasures explored.

2. OBJECTIVES

The Societal Issues Round 4 RFA (SOC4) aims to support research exploring identified local challenges and potential countermeasures to increase adoption of genomic testing in the BC healthcare system.

The SOC4 supports three research phases:

- a. **Understanding** and appreciation of a known challenge in BC
- b. **Ideation** and assessment of countermeasures to a known challenge in BC
- c. **Implementation** plan development and piloting of countermeasure(s) to a known challenge in BC

The SOC4 will limit the understanding phase (Phase a) to a maximum of 25% of the project timeline. This phase may include gathering evidence for the local context. The expectation is for the main research questions to be in the ideation phase (Phase b, 50-75% of the project timeline). To achieve impact, at least 25% of the project timeline must focus on the implementation phase (Phase c). This could include conducting a small proof-of-concept activity as evidence for a larger scale effort. The project scope and budget must reflect feasible objectives and milestones based on team expertise and embeddedness in site of study.

Genome BC may facilitate program-wide or inter-program knowledge sharing or knowledge mobilization activities for funded projects to increase impact.

Applications should contain original research that is needed to meaningfully address questions related to these levels of research activity.

3. PARAMETERS

- Genome BC has committed an investment of \$500,000 to this initiative
- Each project can request up to \$250,000 from Genome BC
- Co-funding (matching funds) is not required but is encouraged for these projects □ Project terms can be up to 24 months

4. ELIGIBILITY

Submissions must meet both the applicant and project eligibility criteria listed below.

Applicant:

- Must be led by an academic researcher based at one of BC’s universities, colleges, the BC Institute of Technology, government facility or other BC-based research or health institution
- Team must include members with expertise in performing relevant qualitative and/or mixed methods research
- Team must include an end-user partner (provide a letter of support)

Project:

- Must identify a challenge of use or accessibility to a genomic test in the health sector
- Must include qualitative research methods
- Must outline research phases and their percentage of the overall project timeline with following limitations:

Phase	Percent of Project
a. Understanding and appreciation of a known challenge in BC	0 - 25%
b. Ideation and assessment of countermeasures	0 - 75%
c. Implementation plan development and piloting of the countermeasure(s)	25 - 100%

Examples of eligible research:

General topic areas	a (%)	b (%)	c (%)
Assessing and piloting a countermeasure in BC from another context	0	25	75
Exploring a known widespread challenge but in the BC context, assessing countermeasures, and piloting implementation of chosen countermeasure	25	50	25
Exploring countermeasures to a known local challenge and piloting implementation of chosen countermeasure	0	50	50
Implementation of previously piloted countermeasure	0	0	100

Note: Percentages shown are possible breakdowns. Phase percentages can vary provided each remains within its specified limit.

5. EQUITY, DIVERSITY AND INCLUSION (EDI)

Equity, diversity, and inclusion are essential to achieving excellence and the full potential of the research ecosystem. Applicants are encouraged to consider how EDI-related considerations can be integrated into their research design and practices. For reference, see the Government of Canada’s Best Practices in Equity, Diversity and Inclusion in Research Practice and Design guide: <https://www.sshrc-crsh.gc.ca/funding-financement/nfrf-fnfr/edi-eng.aspx>

6. APPLICATION PROCESS

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

1. Statement of Interest (SOI) outlining the research question to help assess the eligibility of the proposed project
2. Application providing more details on the research plan with an accompanying budget

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

Statement of Interest

Statement of Interests must provide a brief outline of the proposed project which addresses the eligibility criteria. A SOI template is available on the Genome BC website (www.genomebc.ca) or by contacting Genome BC at societalissues@genomebc.ca.

Statements of Interest will be reviewed by Genome BC to determine eligibility to the RFA. Applicants will be notified within two weeks of their SOI submission date if their project is eligible for full application submission.

Application

Instructions for submitting applications are available in the *Societal Issues RFA - Application Form*, which will be available on the Genome BC website (www.genomebc.ca) 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 this RFA.

A companion Excel budget must also be provided for the project. The template will also be available on the Genome BC website (www.genomebc.ca). Financial guidelines are described in Appendix 2.

Review Panel

Applications will be evaluated by external reviewers using the evaluation criteria in Appendix 1. Financial due diligence reviews will be conducted by Genome BC using the financial requirements outlined in Appendix 2.

Following the full decision process, all applicants, whether recommended for funding or not, will be provided with a written evaluation of their application.

7. TIMELINES

Key dates are listed below. Unless communicated otherwise by Genome BC, submissions must be received by Genome BC by 5pm Pacific Time on the day of the deadline.

Date	Activity
August 2024	Launch of Societal Issues Round 4 (SOC4)
7 October 2024	Statements of Interest (SOI) Deadline

22 October 2024	Notification of SOI results <i>Note that teams that submit an SOI before the deadline will receive the results of their SOI earlier</i>
27 November 2024	Application Submission Deadline
5 March 2025	Notification of Application results
1 April 2025	Earliest project start date

8. 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 a research and financial report at the end of the project. *Genome BC reserves the right to hold back a portion of funding until the completion of the final report.*

9. GENOME BRITISH COLUMBIA CONTACT

Interested researchers are encouraged to contact Genome BC at societalissues@genomebc.ca at their earliest opportunity with any questions or for clarification of any aspects of this RFA. Further information is available on the Genome BC website (www.genomebc.ca).

APPENDIX 1. EVALUATION CRITERIA AND GUIDELINES

Evaluation Criteria

To ensure that Genome BC's Societal Issues Round 4 goals are met, projects will be evaluated on each of the following major criteria, which are regarded as equally important:

- Relevance of research idea to objectives of the RFA
- Quality of research plan and deliverables
- Ability of the research team to deliver
- Management and financial criteria

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

Relevance of Research Idea to Objectives of the RFA

1. Applicants must demonstrate, using specific and clearly defined and quantifiable milestones and objectives, the proposed outcomes to be achieved through the project. Proposals must demonstrate:
 - a. The outcomes from the proposed project (e.g. upon completion and beyond)
 - b. How the project outcomes will address the Societal Issues RFA Objectives

Quality of the Research Plan and Deliverables

2. Proposals must demonstrate:
 - a. That the proposed objectives, goals, milestones and critical path are feasible and that the available resources are adequate to complete the project on schedule. Milestones must provide objective, quantifiable measures of success and should be realistically attainable during the proposed timeframe
 - b. That the design, methods and analysis are adequately developed, well integrated, and appropriate to the aims of the project
 - c. Links to collaborators essential to the project's success (e.g. decision-makers), if applicable
 - d. The quality and suitability of the research/technical environment in which the work will be done
 - e. A plan for handling the research data and resources (data protection, release and publication, resource sharing, etc.), if applicable
 - f. Adherence to research phase timeline minimums and limits
 - g. Adherence to principles contained in the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS2)

Ability of the Research Team to Deliver

3. Applicants must demonstrate that the project leader, co-applicants, and other team members (as applicable) have the ability to accomplish the project objectives. Team must

- a. Have demonstrated leadership and research excellence in relevant methodologies and community engagement for the type of research being proposed. This could include a description of the training and/or track record of the applicant(s) for the proposed research or the importance and relevance of the past work of the applicant(s)
 - b. Have a serious commitment to the project in terms of dedicated time and the amount of resources applied to it **Management and Financial Criteria**
4. To demonstrate a sound project management plan appropriate to the size of the project, applicants should provide the following:
 - a. The communication plan for dissemination of results, including the way research results will be made accessible, communicated and transferred to project participants, user partners, and the scientific community, without conflicting with data protection (e.g. IP, OCAP) policies
 - b. The management and decision-making plan for the project, including:
 - A Gantt chart of activities, linked to the proposed budget, with milestones and go/no-go decision points clearly identified
 - The methods for addressing key challenges, roadblocks, lack of consensus and scientific progress (e.g. adherence to milestones)
 - The individual ultimately responsible for the decision-making
5. To demonstrate a sound financial plan, applicants should provide the following (also see Financial Guidelines in Appendix 2):
 - a. A budget for the project using the template provided by Genome BC. The budget will be assessed on the basis of the following questions:
 - i. Is the project financing plan reasonable and feasible?
 - ii. Do the budgeted costs comply with the Financial Guidelines (Appendix 2)?
 - iii. Are the budgeted costs aligned with the proposed research plan and activities? iv. Is there a clear relationship between the costs and proposed benefits of the project?
 - v. Do the documentation and principal financial assumptions support the proposed budget?

APPENDIX 2. FINANCIAL GUIDELINES

Eligible Costs

Eligible costs are defined as reasonable, new and incremental costs for items that directly support the objectives of the Genome BC approved project. All Genome BC funds must be spent in British Columbia.

Eligible costs may include the following:

1. Salaries:
 - Salaries and benefits for graduate students, post docs, researchers, trainees, technicians. Note that salaries of researchers or senior management who are currently funded by their respective organizations are **not** considered eligible costs; and
 - Payments to persons based outside BC, for example investigators' salaries, are **not** considered eligible costs. However, external costs that are incurred based on a reasonable fee-for-service arrangement or contract are considered eligible.
2. Reasonable and limited operating costs (i.e. day-to-day expenses incurred in conducting the research) such as the cost of conducting surveys or consultations, administrative supplies (e.g. paper, photocopying) and other consumables.
3. Reasonable and low general and administrative (G&A) costs directly linked to undertaking the project. G&A costs must not exceed five percent (5%) of the nonadministrative costs of the project budget (calculated as total budget less administrative costs). Examples of G&A costs include:
 - Costs for the project's communications and public outreach activities, including costs associated with ensuring open access to the findings (e.g. costs of publishing in an open access journal or making a journal article open access);
 - Costs related to travel that are not directly related to the research activities (e.g. travel to conferences). Travel for research activities such as data collection should be listed as consumables under the relevant project activity in the budget; and
 - Costs of attending or participating in conferences.
4. The costs related to services provided by fee-for service providers.
5. Cost of equipment, computer hardware or software, information databases and communications linkages required to complete the project, up to a maximum of \$5,000. Note that equipment under \$2,000 is to be budgeted as a Consumable. The opportunity cost of using existing infrastructure cannot be included as an eligible cost.