



FUNDING OPPORTUNITY: Indigenous Genomics Training and Capacity

Overview

This funding program will strengthen First Nations (status and non-status), Métis and Inuit (hereafter referred to as Indigenous) technical, social scientific and community capacities to engage with and conduct genomics research in ways that uphold and advance Indigenous rights to self-determination. The program will invest in partnerships to support career development and research transition programs that lead to independent research and advance careers in genomics.

Objectives

The program will provide Indigenous-led training opportunities for Indigenous students and community practitioners, equipping them with genomic skills and capabilities that integrate Indigenous knowledge systems, values and perspectives with modern science, technology and social scientific critique. It will foster the exploration of the intersections between Indigenous ways of knowing and practices, and disciplines, such as genomics, environmental science and other scientific and technological fields.

Primary objectives of this funding program:

- **Building Indigenous capacity in genomics:** Strengthening technical, social scientific and community capacities¹ among Indigenous students and practitioners to enable Indigenous student/practitioner engagement in genomics research.
- **Promoting career development:** Supporting career development and transitions into independent research roles, advancing the careers of Indigenous participants in genomics and related fields.
- **Integrating Indigenous knowledge and perspectives:** Equipping participants with skills that blend Indigenous knowledge systems, values and perspectives with modern scientific and technological disciplines.
- **Advancing Indigenous self-determination:** Ensuring genomics research and applications uphold and promote Indigenous rights to self-determination.
- **Fostering interdisciplinary exploration:** Encouraging the intersection of Indigenous ways of knowing with genomics, biotechnology, environmental science and other fields to promote innovative, inclusive and culturally relevant research.

¹ Community capacities refers to the applied skills, knowledge systems and learning approaches that Indigenous communities identify as essential for engaging with and advancing genomics research and knowledge creation. These capacities may be rooted in Indigenous knowledge and practices, or integrated with scientific methods and methodologies.

Funding opportunity

The Indigenous-led projects supported by this funding program will integrate traditional knowledge with modern science, emphasizing community-driven research, place-based learning and practical genomics training. Guided by Indigenous leadership, they will foster mentorship, collaboration and data sovereignty, empowering participants to address real-world challenges and drive innovation in genomics.

Key requirements of the projects supported through this program:

- **Designed for and by Indigenous Peoples**
Projects guided by Indigenous leadership, ensuring they reflect the needs, priorities and aspirations of Indigenous communities while fostering empowerment and self-determination
- **Indigenous-led research and collaboration**
Prioritizing research and partnerships led by Indigenous scientists, integrating traditional knowledge systems with cutting-edge scientific practices to address community-driven challenges
- **Indigenous technoscience curriculum**
A dynamic curriculum developed and taught by Indigenous educators, merging cultural teachings with technical, social scientific and ethical considerations in genomics and related fields
- **Place-based learning**
Training tailored to the unique cultural, environmental and social contexts of communities, emphasizing the connection between knowledge, land and place in the learning process
- **Community of practice framework**
Participants supported within a collaborative network of peers, mentors and experts, creating an environment for shared learning, knowledge exchange and sustained professional growth
- **Practical skills development in genomics**
Hands-on training equipping participants with advanced technical and analytical skills in genomics, ensuring they are prepared to apply their knowledge to real-world challenges and opportunities
- **Data sovereignty and innovation**
Emphasizing ethical data management and analysis, focusing on Indigenous data sovereignty while fostering innovation in genomics to benefit Indigenous communities

Primary goals of this funding program:

- **Trained Indigenous highly qualified personnel (HQP):** A cohort of Indigenous students and community practitioners equipped with advanced genomic skills and interdisciplinary expertise.
- **Career transition opportunities:** Participants successfully transitioning into independent research roles or advancing their careers in genomics and related fields.
- **Culturally-integrated genomics practices:** Development of research approaches, tools and methodologies that effectively integrate Indigenous knowledge systems, values and perspectives with contemporary science and technology.
- **Community-led research projects:** Indigenous-led genomics research initiatives that address community-identified priorities and promote self-determination.
- **Knowledge-sharing and collaboration:** Enhanced partnerships and collaborations between Indigenous communities, academic institutions and research organizations, fostering innovative and inclusive approaches to genomics.

AVAILABLE FUNDING AND TERM

- A maximum of **\$400,000** is available from Genome Canada (this amount excludes program management costs).
- Funding will be allocated to **up to TWO (2) projects**.
- Genome Canada funds will be required to flow on or before **January 1, 2026** and the funded project will have a **maximum term of THREE (3) years**.
- Co-funding is not required but is encouraged.

Process

APPLICATION SUBMISSIONS

The Indigenous Genomics Training and Capacity program will include a one stage application process. Applicants are required to apply through Genome Canada's Proposal Central Portal through a regional Genome Centre.

In the application, applicants will be required to briefly describe:

- How the proposed project will contribute to building Indigenous capacity in genomics.
- How the project will support Indigenous career development and transition into independent research roles.
- How the project will integrate Indigenous knowledge systems, values and perspectives.
- How the project will promote Indigenous self-determination in genomics research.
- The management plan and team, and their roles in the project, including project leadership and oversight.

- The project budget.
- The project co-funding plan (if applicable).

Full applications submitted will undergo an internal eligibility check by Genome Canada. An independent peer review of the proposals received will be completed by a small panel of diverse and independent experts.

ELIGIBILITY AND REVIEW CRITERIA

Project eligibility criteria

- The project must be Indigenous-led and actively engaged with Indigenous communities.
- Project leaders and team members must be affiliated with an eligible institution.

Review criteria

Building Indigenous capacity in genomics

- Evaluate the program's potential to enhance the skills and knowledge of Indigenous communities in genomics.
- Assess the level of involvement and collaboration with Indigenous communities throughout the program.
- Has sustainability of the capacity-building efforts been considered and is the plan appropriate?

Supporting Indigenous career development

- Assess the availability and quality of mentorship and training opportunities for Indigenous individuals.
- Does the program facilitate career progression and transition into independent research roles?
- Does the program promote an inclusive environment that supports the professional growth of Indigenous researchers?

Integrating Indigenous knowledge systems

- Evaluate how the program acknowledges and respects Indigenous knowledge systems, values, and perspectives.
- Assess the extent to which Indigenous knowledge is integrated into the research design and methodology.
- Consider the program's approach to cultural sensitivity and appropriateness in incorporating Indigenous perspectives.

Promoting Indigenous self-determination

- Does the program include involvement of Indigenous leaders in governance and decision-making processes?
- Does the program support Indigenous autonomy and self-determination in genomics research?
- Evaluate the program's efforts to empower Indigenous communities to lead and direct research initiatives.

Management plan

- The project leaders have the qualifications and experience to oversee the program.
- Appropriate mechanisms are in place for project oversight, accountability, and progress monitoring.
- The project team and plan demonstrate a strong track record of success.

Budget and co-funding plan

- Is the budget reasonable for the activities to be carried out?
- If the project has co-funding in place, is it related to the activities proposed and add value to the project?

TIMELINE

Funding opportunity development	February-March 2025
Funding opportunity launched	April 28, 2025
Full application due	September 15, 2025
Notification of results	By mid-October 2025
Project starts	January 1, 2026

PROJECT MANAGEMENT AND REPORTING

Reporting and performance measurement

The projects must submit to the Genome Centre on a periodic basis, information and data which will allow for the on-going assessment of project progress, including performance metrics data, as prescribed by Genome Canada and the Genome Centre. Project leaders or their designates must also, to the extent possible, agree to participate in, and provide information for, any evaluation activities that may be undertaken from time to time by Genome Canada or the Genome Centre up to five years subsequent to the end date of the project. It is the responsibility of the lead research institution to ensure that the project leaders(s) meet these reporting requirements.

Final reports

Within **THREE (3)** months of the completion of the project, each project will be required to submit to its Genome Centre a final report that includes a description of the accomplishments of the project, as well as a detailed financial report in a format determined by Genome Canada. A percentage of the final payment will be held back by either Genome Canada or the Genome Centre and will only be disbursed to the host institution pending receipt and approval of the final report by Genome Canada.