G-Can Initiative Grant: Advancing GBA1 Research and Therapeutics

Overview.

The GBA1 Canada (G-Can) Initiative invites applications for funding to advance research into GBA1-related neurodegenerative disorders, including Parkinson's disease (PD) and Gaucher disease (GD). This program supports innovative, collaborative, and impactful research aimed at understanding the multifaceted roles of *GBA1* mutations and developing personalized therapeutic strategies. The grant emphasizes translational and clinical research that aligns with G-Can's mission of fostering pre-competitive, open science and enhancing resource sharing within the scientific community and industrial partners.

Important dates.

- **Full Proposal Submission Deadline**: January 23th, 2026
- **Award Announcement**: March 2026

Background.

Mutations in the *GBA1* gene, which encodes the lysosomal enzyme beta-glucocerebrosidase (GCase), are the most common genetic risk factor for PD and may cause GD. These mutations contribute to the accumulation of alpha-synuclein and lead to other cellular dysfunctions, thereby accelerating neurodegeneration. Despite these associations, effective disease-modifying treatments remain elusive, underscoring the critical need for robust research initiatives targeting *GBA1*.

The G-Can Initiative, funded by generous contributions from the Hilary and Galen Weston Foundation and other partners, is dedicated to advancing research on *GBA1* and its modifiers. By fostering collaboration across academia and industry, G-Can aims to develop cutting-edge models, tools, and datasets to accelerate therapeutic development and improve patient outcomes.

Program Scopes.

The G-Can Initiative seeks to support research proposals that advance the understanding of *GBA1*-associated mechanisms and accelerate therapeutic discovery through focused, translational, and collaborative efforts. Building on tools and datasets already generated, this call will prioritize projects that:

1. **Apply tools, data, and models to therapeutic testing and mechanistic approaches**
    - Leverage G-Can–generated resources to test new compounds targeting GCase activity or pathways of lysosomal dysfunction (See https://gba1can.org/access-data-tools/)
2. **Study *GBA1*-related biomarkers**
    - Establish and validate molecular, biochemical, imaging, or digital biomarkers that can improve early diagnosis, stratify patients by disease trajectory, and track therapeutic response.
3. **Advance metabolomic and lipidomic profiling for *GBA1*-associated disorders**
    - Prioritize analysis of cerebrospinal fluid (CSF), plasma, and other clinically relevant biosamples.
    - Develop scalable lipidomics/metabolomics assays that can be deployed in longitudinal cohorts and clinical trials.

Projects are expected to be hypothesis-driven, reproducible, and collaborative, with strong potential for translation to clinical applications. Proposals should demonstrate how the generated knowledge, tools, or biomarkers will be shared within the G-Can community to accelerate field-wide progress.

Eligibility Requirements.

Applications may be submitted by researchers or clinicians in:

- Public and private non-profit entities, such as universities, colleges, hospitals, and laboratories located worldwide.
- U.S. and non-U.S. biotechnology/pharmaceutical companies or other publicly or privately held for-profit entities.

Funding Available.

A total of $300,000 CAD is available for funding, providing a maximum of $100,000 for one year for three selected proposals.

Application Process.

Applicants will submit detailed and final applications, including project rationale, experimental design and clear hypothesis, methodology, preliminary data and budget justifications. Total application length should be limited to 5 pages, excluding references (LINK).

Data Sharing and Open Science Commitment.

Aligned with G-Can's commitment to open science, funded projects must:

- Share generated datasets, tools, and models with the scientific community and industry through designated platforms.
- Publish findings in open-access journals to ensure widespread dissemination of results.
- Align with minimum data-sharing protocols.

Contact Information.

For questions about the application process or project suitability, please contact: info@gba1can.org.