LONG COVID WEB

Call for Proposals 2024: Supporting Pan-Canadian Long COVID Research

The Long COVID Web Seed Funding call for proposals aims to support Canadian-led research studies that seek to accelerate our understanding and improve care delivery and treatment of Long COVID. This funding opportunity has been specifically designed to provide seed funding to generate evidence that lay the foundation for future research and applications to other funding opportunities, or to perform and establish necessary fundamental work that enables innovative research.

Preference will be given to research that addresses one or more of the priorities in Appendix A.

Funds Available

Up to $1.2 million CAD is available for this call. With funding amounts of up to $25,000 (4-8 awards, towards trainee/PDF/staff support), up to $50,000 (6-10 awards), and up to $100,000 (4-6 awards) to support 1-year projects.

Eligibility

For the proposed research to be eligible it must fulfill each of the following points:

1. Be registered member with Long COVID Web (https://airtable.com/shrbiqADpoCny2EeT).
2. Be eligible under tri-agency guidelines to be a principal applicant.
3. The nominated principal applicant/s (NPA/s) of any proposed research can only submit 1 application to this competition (while NPA/s can be co-investigator/s on other applications).
4. Emerging scholars and early-career researchers are encouraged to apply.
5. Agree funds will be transferred to an organization eligible to hold CIHR funds; this organization will ensure and report that funds were used for CIHR-eligible expenses.
6. The researchers will acknowledge the Long COVID Web partnership and funding in all related presentations and publications.

Application Instructions

Please combine the following application components into a single PDF:

1. **Application form** including
    a. LCW2023FundingCall - Application Form.
    b. LCW2023FundingCall - Budget Form.
2. **Proposed Research** – A written proposal of one-page for $25,000, two-page for $50,000, and five-page for $100,000 awards (use 12-point font size, black type; a minimum of single line spacing; a minimum margin of 2 cm (3/4 inch) around the page; letter size [21.25 X 27.5 cm / 8.5" X 11"]), including:
    a. Background and rationale (Why this initiative/project? What evidence supports your claim that there is a need for this initiative/project? Why now?).
    b. Research Question.
    c. Methods.
    d. Expected results and timeline.
    e. Potential Impact.
3. Figures, tables, or reference (optional, up to one extra page).
4. Letter of support for match funding (optional, up to one page).
5. **CV** – CIHR Biosketch CV for the Nominated PI and CoPI(s).

Submission Instructions

1. Name the full application PDF following this format: "Last Name_First Name_Project Title_2024".
2. Submit the full application PDF to **info@longcovidweb.ca** by **5pm PST on July 31st, 2024**.
3. Once submitted, a written confirmation with an **assigned application number** will be provided within 3 business days of submission.
4. It is the responsibility of the applicant to confirm receipt of the assigned application number and this number will be used in all subsequent communication regarding your application.
5. If you do not hear back within 3 business days, please follow up to ensure successful delivery.

Adjudication Criteria

Part 1: Scientific Review

The criteria are not listed in order of importance: the relative weighting of each criterion will vary depending on the objectives of the funding priorities as defined by the Long COVID Web. The review of the application should be structured to justify the overall rating based on the five mandatory criteria below in combination with the CIHR scale outlined in Appendix B. Please combine the following application components into a single PDF:

1. **Relevance of the Research** (weight: 20%)
   a) <u>Alignment with Long COVID Web Research Priorities</u>: The proposed research should align with current research priorities in Canada and should aim to fill gaps in Canadian research related to Long COVID. Please refer to both National Task Force (https://science.gc.ca/site/science/sites/default/files/attachments/2023/Post-Covid-Condition_Report-2022.pdf) and Long COVID Web priorities (Appendix A). This is to ensure that the research study is addressing a significant and relevant research question that can contribute to advancing knowledge in this area.
   b) <u>Urgency and Timeliness in Addressing Gaps in Long COVID Knowledge</u>: The proposed study must identify a clear Long COVID knowledge gap and demonstrate the urgency to address the gap at this time and in the Canadian context.

2. **Reach of the Research** (weight: 25%)
   a) <u>Pan-Canadian</u>: The proposed research must be conducted with at least one out-of-province site within Canada or with collaboration from other provinces. This is to ensure that the study is representative of the diverse population of Canada and to increase the generalizability of the results.
   b) <u>Collaborations and Collaborative Process</u>:
      - The proposed research must cross at least two research pillars, including biomedical research, clinical research, health services research, and population health research. The proposed research could either involve members of different research pillars, or align with the priorities of different pillars. This is to ensure a comprehensive approach to understanding Long COVID and to encourage collaboration between different research disciplines.
      - Key collaborations, cross-pillar and otherwise, and the collaborative process (e.g., process for co-designing the proposed research) should be described. The appropriateness and benefit of the collaborations should be clear as well as reciprocal benefit of cross-pillar collaborations.

3. **Patient Engagement, Equity, Diversity, and Inclusion (EDI), and Indigenous Relevance**: (weight: 25%)

These criteria are important to ensure that the proposed study is conducted in a respectful and inclusive manner, and that it addresses the diverse perspectives and needs of all Canadians affected by Long COVID.

a) <u>Patient Engagement</u>: The proposed research study must demonstrate a commitment to patient engagement by including meaningful patient collaboration and contributions. It also needs to demonstrate consideration for trauma-informed approach: to show awareness of medical traumas and gaslighting relevant to the subject of the research and their impacts on people with lived experience.

b) <u>EDI</u>: The proposed research must demonstrate a commitment to EDI within the research team and study design (e.g., the recruitment and participation of study participants, analysis).

c) <u>Relevance to Indigenous Peoples and Communities</u>: The proposal must communicate the relevance to Indigenous peoples and communities. If appropriate, the proposal should be clear about the inclusion of Indigenous perspectives, knowledge, and practices in the research co-design and implementation and outcomes targeting the health/healthcare of Indigenous peoples and communities. It must be clear that Indigenous research principles and protocols are respected.

4. **Advance and Mobilize Knowledge** (weight: 20%)

a) <u>Advancing Knowledge</u>: The proposal should clearly convey how the research will contribute to advancing our understanding of Long COVID and/or its treatment and management (e.g., in clinical practice, in health systems, in populations). This includes the development, implementation, or sustainment of harmonized data, infrastructure or platforms.

b) <u>Knowledge Dissemination and Exchange</u>: The appropriateness and adequacy of the proposed plan for knowledge dissemination and exchange should be clear.

c) <u>Timeliness of Results</u>: The proposed research should demonstrate how it will provide timely information to mitigate the impact of Long COVID on individuals and communities.

5. **Potential Outcomes and Impacts of the Research** (weight: 10%)
Describe the anticipated longer-term benefit of the proposed research, considering the following types of outcomes and impacts:

a) <u>Mobilized Knowledge</u>: potential for accelerated uptake and use of the research results to inform policies, practices, processes in the health system should be conveyed. *Who* the research is meant to inform (e.g., patients, policymakers, clinicians, other researchers, etc.,) and what the research is projected/targeted to change (e.g., practices, policies, processes, behaviours, etc.,)

b) <u>Strengthened Research Ecosystem</u>: potential to improve the reach and quality of collaboration and advancing a 'network of networks'

c) <u>Optimized Responsiveness of Research</u>: Potential for the proposed research to provide a foundation for a larger project / program of research, to initiate innovative research,

and/or be used by other researchers (in the same or other pillars). This also includes the potential to optimize surveillance at scale.

    d) <u>Improved Health:</u> Potential to contribute to the improvement of people's health in Canada and the world.

    e) <u>Improved Quality of Care:</u> Potential to contribute to the development of more equitable, effective, acceptable, accessible, appropriate and safe health services and products that improve the experiences of people with lived experience of Long COVID and their healthcare providers.

    f) <u>Improved Health System Efficiency & Economic Impact</u>: Potential to contribute to optimizing the use of resources and other investments in care to attain the best possible outcomes.

6. **Optional: Match Funding**: While not mandatory, matching funding is preferred. This means that applicants are encouraged to secure funding from other sources to support their proposed study. This can help demonstrate the feasibility and sustainability of the research project and increase the likelihood of its success. (weight: bonus of 10%)

Part 2: People with Lived Experience (PWLE) Review

PWLE reviewers will evaluate the entire application to assign a comprehensive score, with specific attention given to (but not limited to) assessing patient engagement and relevance to post-exertional malaise (PEM).

1. **Patient-Engagement evaluation directly by PWLE**. With use of PORLET 2.0 tool: https://www.scpor.ca/porlet20

2. **Post-exertional malaise (PEM)**. PEM is very frequent in Long COVID and affects many aspects of the management of patients experiencing PEM, clinically, and as research subjects. PEM also affects assessment of many outcomes and is currently still frequently overseen. PWLE will evaluate if PEM is relevant in the proposal from their perspective. Where relevant, PWLE will evaluate PEM-related content in proposals.

Timelines

1. Announcements through the Long COVID Web begin May 1ˢᵗ, 2024.
2. Deadline for Proposals: July 31ˢᵗ, 2024.
3. Awardees Announced: Early December, 2024.

Release of Funds

For studies involving human participants, funds will not be released until a Certificate of approval by the academic or research institute/hospital Research Ethics Board has been received.

Final Report

Please email a final report including a research summary and any presentations, media, publications and/or other grants applied for or awarded in relation to this project. The report is due no later than two months after the grant end date.

Acknowledgement

All materials including recruitment, consent forms, and dissemination activities (e.g., presentations, publications, media appearances, etc.) must acknowledge the funding source and include the following statement:

"This research was (partially) supported by a grant from the Long COVID Web, funded by the Canadian Institutes of Health Research."

Appendix A

Long COVID Web Research Priorities

Pillars	Priorities	Sub-Priorities
Biomedical Team	Investigate host and viral factors in pathogenesis of Post-COVID-19 Condition (PCC)	1. Evaluation of viral persistence, difference between viral strains and clinical/biological phenotypes correlations
	Develop and validate biomarkers for PCC	2. Develop and validate markers of neuroinflammation
		3. Develop and validate markers of autoimmunity
Clinical Team	Establish consistent definitions and core outcome sets	4. Establish consistent definitions for Long COVID
	Validate and establish diagnostic and prognostic tools	5. Validate and establish diagnostic tools
	Test novel therapeutic interventions for PCC	6. Conduct clinical trials to test interventions
Health Services Research Team	Co-develop, validate and adapt case finding algorithms across multiple jurisdictions, populations and type of data	7. Characterize subtypes and phenotypes of Long COVID
	Measure variation in care delivery and outcomes to inform change	8. Examine disparities, including socioeconomic and ethnic/racial disparities, etc. in healthcare utilization
	Others	9. Developing national recommendations for rehabilitation pathways for persons with Long COVID
Population Health Team	Establish a National Patient Registry for ongoing clinical and research purposes	10. Establish collaboration in the form of data sharing across PHAC, Stats Canada, and different provinces to merge the minimal data set into their current surveys
	Simulation and economic modeling to inform policy and resource allocation	11. Identify and estimate the (1) healthcare, (2) societal and (3) patient-level costs associated with PCC over the short and long term.
	Others	12. Identify and evaluate supports and strategies to help people return to work or sustain work (e.g., supports and accommodations)

Appendix B

CIHR – Canadian Institutes of Health Research scale

Descriptor	Range	Definition	Outcome
Outstanding	4.5 – 4.9	The application excels in most or all relevant aspects. Any short-comings are minimal. If an application is innovative, fills an important critical gap in knowledge, has very few flaws, and the investigators have a comprehensive complement of expertise, experience and resources to perform the research.	May be Funded
Excellent	4.0 – 4.4	The application excels in many relevant aspects, and reasonably addresses all others. Certain improvements are possible. If an application is very interesting, makes important advances, the investigators have an appropriate complement of expertise, experience and resources to perform the research, but there are some minor limitations that need to be addressed or a clear description of impact is missing.	
Good	3.5 – 3.9	The application excels in some relevant aspects, and reasonably addresses all others. Some improvements are necessary. If an application is compelling, but has limited scope or impact, and/or raised some concerns about the feasibility and/or team; or in other words, the grant has strengths, but needs work.	
Fair	3.0 – 3.4	The application broadly addresses relevant aspects. Major revisions are required. If an application has merits but also has many limitations. *Will not be funded*.	Not Fundable
Poor	0.0 – 2.9	The application fails to provide convincing information and/or has serious inherent flaws or gaps. If an application has significant flaws and is not ready to be funded. *Will not be funded*.	