

Respiratory Health Effects of Long COVID Operating Grant Competition

Guidelines for Applicants: 2021 Competition

Contents

Introduction.....	1
Purpose	1
Funding Available.....	2
Eligibility.....	2
Important Dates	3
How to Apply.....	3
Documentation.....	3
Evaluation Process.....	5
Use of Grants	6
Administration.....	7
Sponsors.....	7

Introduction

The direct consequences of the COVID-19 pandemic in Canada are familiar to most Canadians and have been severe. As of October 2021, there have been over 1.70 million confirmed cases, more than **87,000** hospitalizations, over **16,000** intensive care unit admissions, and over **28,500** deaths.¹ When symptoms of COVID-19 persist for weeks or months after apparent recovery from the initial acute illness, it is called **long COVID condition** (also known as: Long-COVID; COVID long-haul and other terms). Symptoms of the long COVID condition (*e.g.*, fatigue, anosmia, chest pain, depression, pain in joints/muscles) are increasingly being observed in individuals who have recovered from the initial acute SARS-CoV-2 infection. Some of the common long COVID symptoms relate to the respiratory health system (*e.g.*, shortness of breath, chest pain and cough).² Important research gaps relating to the longer-term health effects of the SARS-CoV-2 infection on the respiratory system remain.

¹ <https://health-infobase.canada.ca/covid-19/epidemiological-summary-covid-19-cases.html>

² <https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/symptoms/post-covid-19-condition.html>

Purpose

The Canadian Lung Association in partnership with the CIHR Institute of Circulatory and Respiratory Health (CIHR-ICRH) developed the *Respiratory Health Effects of Long COVID Operating Grant* competition. This competition aims to fund respiratory research projects that address one or more of the following research areas:

- Treatment and quality of life;
- Mechanism(s) of disease; and/or
- Models of care for Long COVID.

The proposed research projects can include pilot studies, feasibility studies, translational studies, and/or novel and innovative approaches to address issues related to the respiratory health effects of long COVID. Submissions to this competition can be new project ideas or the continuation of existing projects as they relate to the respiratory health effects of long COVID.

Funding Available

- The total amount available for this funding opportunity is \$120,000 enough to fund three (3) grants.
- The maximum amount per grant is \$40,000 per year for one year.
 - Of this \$40,000, applicants must allocate a minimum of \$5,000 for undergraduate studentships in 2022 or 2023.

Eligibility

- A. The nominated principal investigator (NPI) must be an [Early-](#) or [Mid-](#)Career Researcher within 0-15 years of their first independent research appointment at a Canadian Institution by the application submission deadline date.
- B. Applications must be relevant to **at least one or more** of the identified research areas as they relate to the respiratory health effects of long COVID. Applications deemed non-relevant will be withdrawn from the competition and will not be considered by the peer review panel.
- C. Studies previously funded by CIHR as part of the [COVID-19 Response](#) are not eligible.
- D. Appropriate facilities must be available for the research. An institution through which the funds will be administered also needs to be identified and this institution must be authorized to administer CIHR funds (see a list of authorized institutions at: <http://cihr-irsc.gc.ca/e/36374.html>).
- E. Applicants may only submit **one application** as a principal investigator or a co-principal investigator.
- F. At the time of registration and for the duration of the award, the principal investigator, co-principal investigator, co-investigator(s), and collaborator(s) are not eligible if they hold or have previously held funding, directly or indirectly, from the tobacco and/or vaping industry.

Important Dates

1. Registration including abstract submission via <https://form.simplesurvey.com/f/l/long-covid-2021-registration> by **December 16, 2021 at 3:30pm ET**
2. Electronic copy of application submitted via <https://form.simplesurvey.com/f/l/long-covid-2021-application> by **January 13, 2022 at 3:30pm ET**
3. Notification of funding by **March 31, 2022**.
4. Funding Start Date: **March 1, 2022**.
5. Funding timeframe: **March 1, 2022 to March 1, 2023**.

How to Apply

Registration

The applicant must register by completing and uploading the online registration form along with a maximum one-page abstract of the research proposal <https://form.simplesurvey.com/f/l/long-covid-2021-registration> by **December 16, 2021 at 3:30pm ET**. The applicant is required to provide the names of all investigators and collaborators, the research proposal title, keywords, the abstract, and three (3) suggested reviewers.

- Abstract: One page (8 ½" by 11"), single-spaced, 12-point Times New Roman or 11-point Arial font. No condensed type or spacing. Leave a 2-centimeter margin around the page.

The Canadian Lung Association will confirm receipt of the registration by email.

Application submission

The applicant must submit their application by completing and uploading the application form in PDF format along with all supporting documentation via <https://form.simplesurvey.com/f/l/long-covid-2021-application> by **January 13, 2022 at 3:30pm ET**. The online application submission form requires similar information to the online registration submission form.

The Canadian Lung Association will confirm receipt of the registration by email.

Applications from NPIs who did not register will not be accepted.

Documentation

- Use 8 ½" by 11" letter-sized paper, and single-spaced.
- Use 12-point Times New Roman or 11-point Arial font. Condensed type or spacing is not acceptable.
- Leave a 2-centimetre margin around the page.
- No photo-reduction except for figures.
- Attachments must be uploaded in PDF format (unprotected).

The Canadian Lung Association assumes no responsibility to follow up with applicants who submit incomplete applications. **The responsibility to ensure the application is complete, including all required signatures, rests with the applicant.**

The Canadian Lung Association reserves the right to withdraw late or incomplete applications, application not respecting the formatting specification, or those exceeding page limitations, from the competition.

Grant proposal

The proposal should focus on the hypothesis(es) to be tested, the background, the approach, and the knowledge translation plan. The application should outline methods that are critical to the proposal and avoid explaining detailed technical methods.

- Maximum of three (3) pages research proposal
- Maximum of two (2) pages of additional materials such as references, tables, charts, figures, and photographs, etc.

Other Considerations:

Applicants are required to include an additional one (1) page document to their proposal briefly describing how they intend to address the following (as applicable):

- **Equity, Diversity and Inclusion (EDI):** COVID-19 disproportionately affected racialized communities. Applicants should describe how EDI will be incorporated into the collection of samples/patients, the analyses and the interpretation of results.
- **Sex and gender based Analysis (SGBA):** Applicants should describe how sex and gender will be incorporated into the collection of samples/patients, the analyses, and the interpretation of results.
- **Indigenous Health Research (IHR):** since COVID-19 disproportionately affected Indigenous People and their communities, where appropriate, the investigators should describe how Indigenous status will be collected from samples/patients, the role of that status in the analyses and the engagement of the Indigenous community in the interpretation of results.
- **People with lived experience (PWLE):** the experience of patients and PWLE are important considerations in research on long-COVID conditions. Applicants should describe how PWLE will be involved in the project and what role(s) they will play in the knowledge mobilization efforts.

Applicants are also required to complete one of the [sex- and gender-based analysis training modules](#) available online through the CIHR Institute of Gender and Health and submit a Certificate of Completion by the application deadline.

Investigators and co-applicants

Applications must include the NPI and all the project participants if applicable. If the proposed research entails significant collaboration with investigators not named as co-applicants, the applicant should include a signed statement of support for each collaborator(s).

Conflict of interest

Should an applicant or any project participant(s) have current or previous relationships with private industry including, but not limited to, financial or in-kind support for research, the applicant(s) must justify in a one (1) page attachment for peer review consideration how this/these existing or previous relationship(s) will contribute to the research as well as any potential risk, or conflict of interest, **considerations as appropriate.**

Budget justification

- **Salaries and benefits:** Provide names, if known, categories of employment, and proposed salaries including non-discretionary benefits of all personnel identified in the budget. Note: Applicants must allocate a minimum of \$5000 to support an undergraduate studentship during the tenure of the grant.

- **Experimental animals:** Include species to be used and sample size justification along with calculations (including male/female calculations), if applicable. Provide a breakdown for procurement, breeding, boarding, and feeding. Where possible, include a copy of the institution's standardized costs for these tasks as they vary from institution to institution.
- **Materials and supplies:** Provide details and justify/explain major items. Do not simply list items.
- **Others:** Provide justification/explanation for each item listed.

Financial support (if applicable): Provide a brief explanation of any financial (not in-kind) contribution from other sources, if applicable. If any of the investigators on the research proposal hold financial (not in-kind) support from other sources for the same project or if they are applying for other funding, the application must describe the degree of overlap with the current application. This includes awards funded or applied from all sources. It should be indicated whether the proposal is being presently funded, applied for, or renewed. All funding sources must be disclosed. Priority will be given to scientifically excellent research proposals that are not currently funded from other sources.

Progress and end of grant reports

All investigators receiving a Long COVID Grant must submit a progress report and an end of grant report to the Canadian Lung Association. CIHR may also require additional end of grant reporting.

Evaluation Process

- a) Applications will be screened by the CLA staff for eligibility and completeness prior to adjudication. The CLA and CIHR-ICRH will perform a relevance review to identify applications that are relevant to and in alignment with the purpose and research areas of this funding opportunity. Applications deemed not relevant will be removed from the competition.
- b) All relevant applications will undergo peer-review by the CLA Adjudication Committee, which includes expert reviewers and knowledge users. Representatives from funding partner organizations may be present as observers for discussions during peer-review.
- c) The investigator(s) track record(s), quality of the research and knowledge mobilization plan are the principal criteria on which the applications will be evaluated. More specifically, points considered in the assessment of an application are as follows:

Investigator(s) Track Record(s):

- Research experience and productivity;
- Demonstration of academic achievements;
- Ability to carry out and achieve the goals of the proposed research.

Research and Knowledge Mobilization Plan:

- Clarity of the research plan;
- Alignment with the objectives and relevant research area of the funding opportunity;
- Originality and/or innovation of the research plan;
- Potential impact of the proposed research on Long COVID research;
- Appropriateness of proposed research methodologies to be employed;
- Appropriateness and quality of the knowledge mobilization plan to use the outcomes and disseminate the results, including future external grant applications.

- Appropriateness of the proposed timeline;
- Demonstration of feasibility and ethical and safety considerations of the proposed research;
- Appropriateness of budgetary items and quality of budget justification;
- Appropriate incorporation of biological variables (e.g., sex, age) and social determinants of health (e.g., gender, race, ethnicity, cultural background, economic status) where applicable, including a plan to disaggregate analyses by sex and/or gender and ethnicity or cultural background (e.g., First Nations, Inuit, Métis, and Urban Indigenous Community)).
- For research involving Indigenous Peoples: appropriate consideration of TCPS2: Chapter 9 and demonstration of meaningful and culturally safe practices, plans and activities throughout the research project.
- Availability and accessibility of personnel, facilities, infrastructure and/or other resources required to carry out the research plan;
- Role of equity, diversity and inclusion (EDI) in the research environment.

Use of Grants

CIHR's portion of the grant will be governed by the Tri-Agency (CIHR, NSERC, SSHRC) Financial Administration Guide, found here: https://www.nserc-crsng.gc.ca/InterAgency-Interorganismes/TAFA-AFTO/index_eng.asp.

Indirect costs policy

The Canadian Lung Association supports only the direct costs of research. No funding is to be used for indirect costs of research. For the purposes of this policy, indirect costs are costs that cannot be directly associated with a particular research program or operating grant including costs associated with the general operation and maintenance of facilities (from laboratories to libraries, the management of the research process (from grant management to commercialization), and regulation and safety compliance (including human ethics, animal care, and environmental assessment).

Categories of expenditures

Grantees are allowed discretion in the categories of expenditures within the approved budget. Prior approval of the Canadian Lung Association should be obtained before any major changes are made in the way the grant funds are spent.

The Canadian Lung Association-funded research and training grants do not provide for institutional overheads and/or indirect costs of research or clinical care. Limitations specified in the grant notification must be respected.

Ineligible expenditures

- Long-COVID grant funds may not be used to pay fees for membership in scientific societies or for journal subscriptions.
- Long-COVID grant funds may not be used for travel costs.
- Long-COVID grant funds may not be used to purchase equipment.

Publication costs

It is acceptable to include an anticipated publication cost of a maximum of \$2,000 in total into the expendables category of the budget.

Unspent balance

Any unspent balance at the end of the grant period reverts to the Canadian Lung Association and CIHR and will be used to support further research activities.

Inability to complete research

The institution is responsible for advising the Canadian Lung Association and CIHR-ICRH promptly if the grantee is unable for any reason to carry out or complete the research for which the grant funds were given.

Acknowledgements

The Canadian Lung Association and CIHR-ICRH must be acknowledged in any publication arising from research supported by the grant funds with the following suggested wording as applicable:

This work was supported by a peer-reviewed grant jointly funded by the Canadian Lung Association and the Canadian Institutes of Health Research's Institute of Circulatory and Respiratory Health (CIHR-ICRH).

Copies of abstracts and publications arising from Long-COVID Grant-supported research should be sent to the Canadian Lung Association at the time of the publication.

Location of research

Funds from this grant may only be used to support research conducted in Canada.

Administration

The Canadian Lung Association and CIHR-ICRH may release scientific abstracts and lay summaries of Long-COVID Grant-supported research for print and other media. Awards will be posted on the Canadian Lung Association and CIHR-ICRH websites.

Indemnification

The Lung Association and CIHR-ICRH, its directors, officers, and employees shall not be responsible for any claims or other matters arising from employment or any other matter occurring by reason of or arising out of the funding of the proposed research.

Sponsors

Canadian Lung Association

The [Canadian Lung Association](#) is the leading organization in Canada working to promote lung health and prevent and manage lung disease. The mission of the National Respiratory Research Strategy is to provide national leadership for research, training, network and knowledge translation programs to promote the prevention and treatment of respiratory diseases and enhance the health of all Canadians.

Breathing as One (BaO) is a national fundraising campaign that supports The Lung Association's innovative National Respiratory Research Strategy (NRRS). The NRRS is an initiative of The Lung Association, in collaboration with the Canadian Thoracic Society and the Canadian Respiratory Health

Professionals. The NRRS advances the prevention, detection, management, and treatment of breathing disorders and respiratory diseases to improve the lung health of Canadians by funding research, enhancing and integrating training for researchers, and supporting knowledge translation.

CIHR-Institute of Circulatory and Respiratory Health (CIHR-ICRH)

[The Canadian Institutes of Health Research \(CIHR\)](#): At CIHR, we know that research has the power to change lives. As Canada's health research investment agency, we collaborate with partners and researchers to support the discoveries and innovations that improve our health and strengthen our health care system.

[The CIHR-Institute of Circulatory and Respiratory Health \(CIHR-ICRH\)](#) supports research into the causes, mechanisms, prevention, screening, diagnosis, treatment, support systems and palliation for a wide range of conditions associated with the heart, lung, brain (stroke), blood, blood vessels, critical and intensive care, and sleep. The CIHR-ICRH vision is to achieve international leadership by fostering an environment of openness, excitement, energy, commitment and excellence in highly ethical, partnered initiatives focused on research, research training, and research translation for the circulatory and respiratory sciences and for the betterment of the health of Canadians.