CALL FOR PROPOSALS

CLINICAL TRIAL PROGRAM
Clinical Evaluation of Innovative Cancer Biotherapeutics
Program Description and Application Guidelines

OVERVIEW

The Biotherapeutics for Cancer Treatment Network (BioCanRx) is a not-for-profit organization with a mission to improve outcomes for cancer patients by accelerating the development of cost-effective and curative biotherapies. BioCanRx has been awarded seed funding of $25 million from the federal government's Networks of Centres of Excellence (NCE) Program, with additional contributions coming from partners in all sectors of the economy.

This call for proposals is open to all investigators located at Canadian institutions eligible to receive peer-reviewed funding from the three federal research granting councils (CIHR, SSHRC, NSERC). If you have questions regarding your eligibility, or that of your institution, please contact Kelley Parato (keparato@biocanrx.com).

BioCanRx provides funding for four research programs (described below), plus a number of core facilities that are accessible to all members of the BioCanRx network. Three of the research programs are directed at therapeutic development and reflect the translational focus of BioCanRx, which organizes its investments into a pipeline-like structure common to the biotechnology industry. The fourth research program funds research into the clinical, social and economic impact of BioCanRx biotherapeutic platforms and technologies. All research programs are targeted at applicants who have already made substantial advances in their basic research programs and are now ready to work in collaborative, multidisciplinary, academic–industry teams to move their discoveries into the clinic in a rational, scientifically well-supported and highly disciplined fashion.

The Catalyst Program

(Funding of approximately $3.5M over five years, supporting a total of 15 to 20 projects)

This program will provide financial support for short-term, collaborative projects that have clear deliverables and will either result in an application to one of the other two BioCanRx programs, or will generate tools or methodologies that may be used by numerous BioCanRx members. Examples of projects that might be funded through this program include: preclinical validation of a new combination of biotherapeutics; or, the development of an innovative manufacturing technology.

The Enabling Studies Program

(Funding of approximately $5.5M over five years, supporting a total of 8 to 10 projects)

This program will provide financial support and resources for GMP manufacturing and process development, GLP assay development and studies required to position biotherapeutic products or platforms for their translation to clinical testing. The anticipated deliverable from these projects will be a Clinical Trial Application (CTA) in Canada.

The Clinical Trial Program

(Funding of approximately $4.0M over five years, supporting a total of 5 to 7 projects)

This program will provide financial support for the clinical evaluation in Canada of novel biotherapeutic products and platforms that have been substantially developed in Canada. The program is focused on clinical trials using biotherapeutics, including but not limited to: oncolytic viruses, immune cell therapies, and therapeutic antibodies, either as mono-therapies or in combination. The required deliverables include

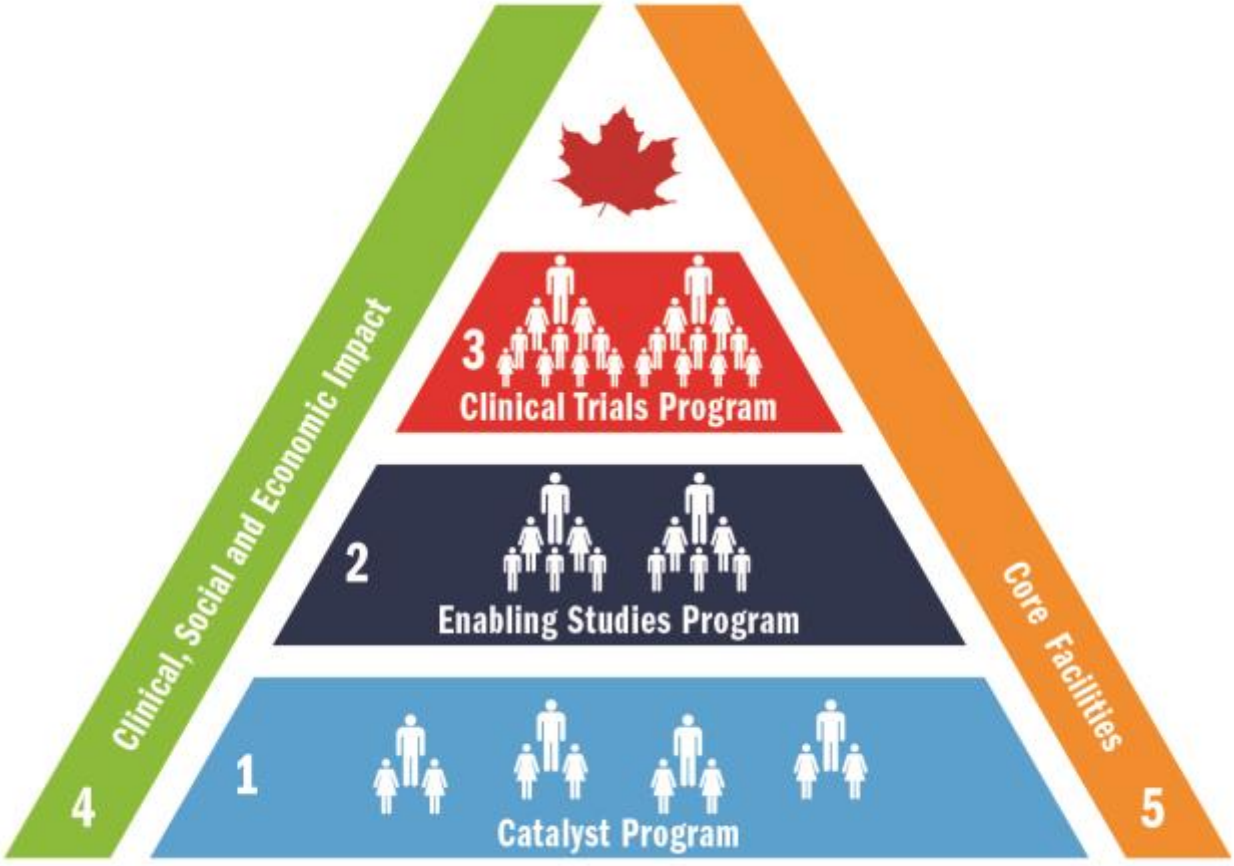
clinical data required to evaluate the case for advancing the therapeutic into later-stage clinical development.

The Clinical, Social and Economic Impact Program

(Funding of approximately $1.5M over five years)

This program is intended to provide financial support for the implementation or application of research methodologies, tools or assets to identify gaps and advance solutions in the uptake of BioCanRx cancer biotherapeutics and companion technologies by receptors, including cancer patients, health-care delivery systems, commercial partners and health-care markets. The anticipated deliverables include data and key findings that: are related to specific projects, platforms or technologies in the BioCanRx research portfolio; assess economic, social, and/or commercial impact; and either informs decisions to advance BioCanRx-funded therapeutics into later-stage clinical development, or adds value to our technologies for their receptors.

Our Research Investment Program



CLINICAL TRIAL PROGRAM

Projects funded by the Clinical Trial Program are expected to be high-content, academically driven, early phase clinical trials. They will test Canadian innovations in cancer biotherapeutic products or platforms developed as mono-therapies or in combination. Proposals must outline preclinical scientific rationale for the approach and highlight the anticipated impact within the field. Proposals must clearly demonstrate the ability of the assembled team to conduct the clinical trial and the feasibility of the study. Proposals should maximize the use of BioCanRx GMP manufacturing or GLP assay core facilities (use of alternate third party vendors or facilities must be well-justified).

BioCanRx will not fund clinical trials that duplicate technologies already in development within the pharmaceutical industry or that replicate trials for which other academic groups clearly have global leadership. Such proposals will be subject to administrative triage.

Project teams are required to be multidisciplinary and collaborative. This can be demonstrated by integrating BioCanRx core facilities (GMP, GLP) into the project and/or by conducting studies that involve multiple sites. Projects should also outline: a clear project management plan, timelines for patient accrual, and an anticipated end date for clinical data collection and evaluation. In order to submit a proposal for funding under the BioCanRx Clinical Trial Program, teams must have already submitted a Health Canada Clinical Trial Application.

Project teams may be required by the Research Management Committee (RMC) to collaborate with the investigators within the Clinical, Social and Economic Impact (CSEI) program. The CSEI investigators may work with key project team members to prepare an economic or market assessment of the innovation, with the goal of supporting a Phase II clinical trial application and securing additional funding for later stage trials. Any work undertaken by CSEI investigators will be funded separately and need not be included in the project budget.

Eligible expenses

Eligible expenses under the Clinical Trial Program are identical to those defined under CIHR guidelines (see http://www.cihr-irsc.gc.ca/e/805.html). At this time, equipment purchase is not an allowable use of BioCanRx funds. As the NCE program also looks to BioCanRx to focus on the development of highly qualified personnel (HQP), applications that invest BioCanRx funds in personnel costs and demonstrate a commitment to training will be reviewed more favourably than those proposing to invest BioCanRx funds in materials, reagents and supplies. Funds awarded may be used to pay for services of third party vendors for specialty/custom materials and services, or for services beyond the capacity of BioCanRx core facilities and network investigators. These expenses must be well justified.

Budget and partnerships

While there is no maximum grant, please remember that BioCanRx funding is targeted to meet around 40% of a trial's total cost. BioCanRx recognizes that the first contribution toward the cost of a trial is often the most difficult to secure and expects that the validation of the BioCanRx peer-review process should assist in efforts to secure additional partners. Therefore, applications may be made without all funding partners being finalized; however, BioCanRx will only release its funds if, **within six months of the date of the award**, the project leader provides letters of support from other partners demonstrating that the full costs of the trial have been secured. If needed, the BioCanRx network's management team will assist approved clinical trial projects in securing co-funding partners.

In determining the scope of the budget request, please also bear in mind that BioCanRx wants to **catalyze** five to seven clinical trials over the next five years with the $4 million it has to invest in its Clinical Trial Program. As a result, projects put forward with unrealistic budgets will be administratively triaged.

It is critically important to remember that fostering inter-sectoral and multi-institutional partnerships is at the heart of the NCE Program. Applications that are based on work of a single investigator with little external involvement will be administratively triaged. Applicants should note that, when evaluating proposals, BioCanRx will focus more on the quality of partner engagement than the number of partners involved. A letter of support will be far more favourably received if it demonstrates a partner that clearly understands the scope of the project, can describe their specific role within it, and articulates the value they are contributing to the project and receiving from project involvement/participation, as opposed to a letter describing a large discount on a major piece of equipment. Please refer to the BioCanRx Policy on Industry-Partnered Research (see https://biocanrx.com/wp-content/uploads/2017/08/3.3a-BioCanRx-Policy-on-Industry-Sponsored-Research-3-1.pdf) in preparation of your application.

Applicants should also be aware that BioCanRx is **not** overly concerned about their ability to demonstrate that partner dollars being pledged to the project are uniquely attributable to the BioCanRx investment; so, partnership already secured for other grants **may** be eligible. What is important to BioCanRx is that its funding be used to align all of these investments toward a common goal — that the BioCanRx funding brings together project funding for a greater impact than otherwise possible. If applicants are repurposing earlier investments to their BioCanRx project, they require updated letters of support from their partners that speak specifically to this BioCanRx project and confirm that the partners are comfortable with their investments being directed in this manner.

Please note that if applicants plan to use BioCanRx Core Facilities in the conduct of their proposed research (see https://biocanrx.com/research/core-facilities), the facility leader(s) should be listed as an applicant team member and should receive funding in the proposed budget to conduct the planned work. The Core Facility budget should be developed in collaboration with the Core Facility leader or delegate.

Project management and reporting expectations

Rapid advancement of novel therapies into the clinic and into later-phase clinical trials is predicated on strong and effective project management. Every application must identify a **single** investigator to act as project leader. The project leader is accountable to BioCanRx for the preparation of all project team reports and for overall project progress.

In the application, the project leader must identify a well-qualified project manager with a track record of overseeing clinical trials. (Note: Experience from other NCEs shows that this role is generally not appropriate for a post-doctoral fellow or technician as an adjunct to their other roles). It is expected that the project manager will co-ordinate periodic team meetings (at least bi-weekly and to which BioCanRx will be invited to participate) to ensure the clinical trial remains on track. Project managers will also be responsible for providing timely and accurate budget and statistical data, as required by BioCanRx, for all project team members. This may include interacting with the institutions of other team members. In recognition of the meaningful role of project managers, a portion of the salary of a project manager is an eligible and expected budget expense.

Projects will also be required to submit formal progress reports to the BioCanRx Research Management Committee (RMC) every six months, and project leaders may be asked to present in person to the RMC. The review is intended to provide ongoing advice that will maximize the project's chances of success. However, while BioCanRx recognizes the absolute importance of a firm financial commitment in launching a clinical trial, BioCanRx reserves the right to reduce or cancel a project budget, with an appropriate lead time, if the project is clearly not meeting its milestones and deliverables. When meeting with the RMC, project leaders may also request reallocation or changes in budget, as circumstance warrants.

Knowledge sharing

In keeping with the collaborative nature of the BioCanRx network and the investment of the NCE Program in creating and fostering networks, it is expected that project leaders will share data and/or research outputs arising from their projects with other network investigators in real time, whenever possible.

Evaluation criteria

The BioCanRx Research Management Committee will evaluate applications to the Clinical Trial Program according to:

- Relevance to the BioCanRx mandate (i.e., evaluation of novel innovations in cancer biotherapeutics);
- Scientific excellence, creativity and innovation, in an international context;
- Feasibility of the study and access to required resources and expertise;
- Applicability or benefit to the advancement of current technologies within the BioCanRx research portfolio;
- Multidisciplinary and collaborative aspect of the proposed team and research;
- Commitment and level of involvement of partners;
- Clear project management plan (milestones and deliverables, timeline, human and financial resources);
- Feasibility of completing the trial within the term of the grant;
- Quality and validity of the study design;
- Appropriate budget justification; and
- Track record of the applicants.

Criteria for release of approved project funding

All applications will be subject to review and recommendation by the BioCanRx's Research Management Committee. All project investments must be approved by the BioCanRx Board of Directors. Following Board approval, the following conditions must be fulfilled if funding is to be released to the project:

- ❑ Provide BioCanRx with a copy of Health Canada approval for trial;
- ❑ Provide BioCanRx with a copy of notice of REB approval for trial;
- ❑ Provide BioCanRx with a copy of the trial budget submitted to the REB;
- ❑ Provide BioCanRx with letters of support from partners showing that the full costs of the trial have been secured, and required leverage obtained;
- ❑ Provide BioCanRx with confirmation that adequate liability measures/insurance are in place for the study;
- ❑ Execute and return the BioCanRx Letter of Award; and
- ❑ Ensure your research institution has executed BioCanRx Network Agreement, and all investigators and project personnel have signed Appendix A to the Network Agreement.

Unless a further extension is granted by the Board, if these conditions have not been met within six months of the notice of award date, the award will be cancelled.

APPLICATION PROCESS

To be eligible to apply, the applicant must employed by a Canadian research institution and be eligible to receive research funds from CIHR, SSHRC or NSERC.

The application package must be delivered by email to applications@biocanrx.com and must be received by 11:59 am ET, by the specified deadline in advance of a BioCanRx RMC meeting.

Please direct questions about the program and application process to Kelley Parato, BioCanRx Director, Scientific Affairs (keparato@biocanrx.com; 613-739-6595) or Stéphanie Michaud, BioCanRx President and Chief Executive Officer) (smichaud@biocanrx.com; 613-739-6202).

A complete application includes:

Document 1: Application form: A single PDF file that includes the completed application form, in single spaced type, Times New Roman or Arial (minimum 11 pt font), with 1 inch margins. Please enter the project leader's name in the header. The file name should include the project leader's name (e.g., Bell_CT_Application.pdf).

Document 2: Personnel: A single PDF file including a Canadian Common CV (CCV) in CIHR, NSERC or SSHRC format for each network investigator requesting BioCanRx funding. Do not include collaborator or trainee CVs. You should include selected publications relevant to the current application, but do not exceed one page. Do not submit your CCV online, instead print the CCV as a PDF file. The file name should include the project leader's name (e.g., Bell_CVs.pdf).

Document 3: Partners: A single PDF file that includes letters from eligible partners. The file name should include the project leader's name (e.g., Bell_PartnerLetters.pdf).

Document 4: Budget: A single Excel file, detailing the total clinical trial cost, and a breakdown of use of BioCanRx and partner funding. For BioCanRx funds, budget expenditures should follow CIHR guidelines. Budget justifications are included in Section 7 of the application form. The file name should include the project leader's name (e.g., Bell_Budget.xls).

Document 5: Appendix (optional): A single PDF file containing any vendor contracts or service quotes in support of the budget request, as applicable. The file name should include the project leader's name (e.g., Bell_Appendix.pdf).