2013 Call for Proposals

Canadian Breast Cancer Foundation (CBCF) – Canadian Institutes of Health Research (CIHR)

Breast Cancer in Young Women Research Program

Overview
The Canadian Breast Cancer Foundation (CBCF), in partnership with the Canadian Institutes of Health Research (CIHR)- Institute of Cancer Research (ICR), is seeking proposals for a multi-disciplinary, integrated research program focused on breast cancer in young women.

Important Dates

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<td>May 15th 2013</td>
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<td>Review of LOIs and Award of Development Grants</td>
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Background
Breast cancer is the most common cancer in Canadian women, after non-melanoma skin cancer. One in nine Canadian women is expected to develop breast cancer during their lifetime and one in 29 will die from their disease. In 2012, this translated to an estimated 22,700 new breast cancer diagnoses and 5,100 deaths in Canada.

Breast cancer risk increases with age with about 80% of cases occurring in women over 50 years of age and more than half occurring in women between the ages of 50 and 69. However, 19% of all new breast cancer cases in Canada are diagnosed in women less than 50 years of age. For young women, especially those under the age of 40, breast cancer tends to be more advanced at the time of diagnosis and often presents as a more aggressive disease, exhibiting increased resistance to standard treatments, resulting in a poor prognosis. In addition, there are many unique challenges associated with a diagnosis of breast cancer in women under 40, such as pregnancy associated breast cancer; loss of fertility; early career disruptions; care of young children amid the complex reactions of family, friends and partners; and the shock of facing an unexpected cancer diagnosis at such a young age. Although a considerable amount of breast cancer research is underway in Canada, few research projects focus specifically on the sub-population of young women, especially those without a family history of breast cancer.
In September 2012, the Canadian Breast Cancer Foundation (CBCF) and the Canadian Institutes of Health Research (CIHR) Institute of Cancer Research (ICR) joined forces to convene a consultation workshop. A broad range of participants from many disciplines and backgrounds came together for two days to explore strategies to address this underserved area of research. The recommendations from this workshop informed the development of this current strategic research initiative. Potential applicants are advised to consult the full workshop report: CBCF-CIHR Breast Cancer in Young Women Workshop Report

Data presented at the workshop confirmed that, in Canada, most of the breast cancer research funding related to breast cancer in young women has supported research on BRCA positive breast cancer with a family history, with little research focused on sporadic forms of breast cancer in young women. This is most likely because breast cancer in this younger age group is rare, with only about 1,500 diagnoses per year. This low incidence, coupled with the relatively small and dispersed Canadian population, presents a challenge to researchers attempting to capture a large enough cohort to support statistically powered research. Workshop participants expressed enthusiasm for the idea of creating a national network/consortium to support collaborative, multidisciplinary, multi-jurisdictional, translational research designed to ensure the incorporation of research outcomes into current standards of care.

This funding opportunity has been designed to facilitate progress in this underserved research area towards improving the clinical outcomes and quality of life for young women with breast cancer.

Objectives:

- To focus the efforts of the Canadian research community on breast cancer in young women, with a special focus on women aged 40 years of age or less, with the ultimate goal of improving their clinical outcomes and quality of life
- To address a gap in breast cancer research not currently served by traditional operating grants or other existing funding mechanisms

Program Description

The successful Program will:

- Develop a coordinated Program of research, under a single leadership, that will overcome the geographic, numerical, and interdisciplinary challenges encountered when studying breast cancer in young women;
- Be comprised of a minimum of three independently fundable, synergistic sub-projects;
- Establish a team of recognized Canadian leaders in breast cancer research, spanning at least three distinct disciplines, that shows promise of true synergy in advancing toward treatment goals not attainable by any individual component;
- Create a critical mass of researchers working collaboratively and synergistically at several sites to move research results more effectively towards clinical applications and interventions for young women with breast cancer;


2 http://www.cbcf.org/central/YourDollarAtWork/Grants
Harness existing research resources, including cohorts, bio-sample repositories, administrative data sets, and relevant centres of research excellence, to avoid duplication of effort, and build on current Canadian and international activities;

Provide a detailed plan to measure the potential impact of the research Program, by establishing a baseline at the outset and a comparative measure at the end of the funding period.

**Partners**
The opportunity to add new partners to this funding opportunity may arise after the RFA launch. These partners may not be listed; however, the principles that govern relevance review and funding decisions will still apply in these cases.

**Funds Available**
The amount available to support a single Program Grant is $6 Million over 5 years; approximately $1.2 million/year. Of this:

- $3 million is available from CBCF as part of the CBCF National Grants Program.
- $3 million is available from CIHR-ICR, through the Canadian Breast Cancer Initiative (CBCI).
- The total amount available to a successful Program may increase if additional funding partners participate.
- Equipment costs must not exceed 10% of the total budget request and will be awarded in year one.
- In addition, application development funds (Planning Grants) of up to $25,000 each will be available for Program applications deemed relevant at the Letter of Intent stage.

**IMPORTANT NOTES:**
1. While multiple applications will be accepted, the intent is to fund one Program.
2. Groups are encouraged to join together during the planning stages and/or incorporate novel groups not included at the LOI stage.
3. The CBCF and CIHR-ICR financial contributions for this initiative are subject to availability of funds. Should funding levels not be available or are decreased due to unforeseen circumstances, the funding partners reserve the right to reduce, defer or suspend financial contributions to grants received as a result of this funding opportunity.
4. This is not a CBCF Regional Competition. This is a CBCF National Grant Competition provided in partnership with CIHR-ICR and additional to CBCF Regional Competitions. For more information about CBCF Regional grant competitions please refer to [http://www.cbcf.org/](http://www.cbcf.org/).

**Relevant Research Areas**
The successful Program will span the multiple disciplines of breast cancer research to support a holistic, "whole woman" approach. Eligible research areas include but are not limited to:

- Prevention and risk reduction
- Genomics and molecular oncology
- Therapeutics
- Survivorship and psychosocial issues
Each of these theme areas is described in more detail in the workshop report: CBCF-CIHR Breast Cancer in Young Women Workshop Report.

**Eligibility Guidelines**
Applicants funded through this funding opportunity and any other persons working on the funded projects must comply fully with the CBCF and CIHR Funding Policies and Guidelines. Policies and Guidelines cover areas such as Applicant Responsibilities, Official Languages Policy, Access to Information, and Acknowledgement of CBCF and CIHR Support, and can be found online [here](http://www.cihr-irsc.gc.ca/e/204.html) (CIHR)\(^3\) and [here](http://www.cbcf.org/central/ApplyForGrants/Documents/2013_NationalGrantsGuidebook_BCYW.pdf) (CBCF)\(^4\).

Administrative Structure:
- The Program must nominate a Program Principal Applicant and Host Institution to accept administrative responsibility for the Program.
- Each sub-project must have its own, independent Principal Applicant.

Eligible program costs include:
- Research operating costs for the proposed research Program.
- Purchase of equipment and maintenance contracts for common services and shared facilities essential for the Program.
- Costs of data collection, database and maintenance of information holdings directly related to the program.
- Set-up and maintenance costs for an administrative/coordinating centre, which may be a physical centre or a virtual network, and includes office supplies and the salary of program support coordinator(s). No more than 10% of the annual funds per year can be invested in the support of the administrative structure.
- Costs of regional, national and international networking activities, including collaboration, planning, and knowledge exchange activities directly related to the Program.
- Costs of an annual scientific/networking meeting or the creation and support of a website for the Program - not to exceed 10% of the annual funds.
- Salaries of research assistants, technicians, program coordinators, trainees and other personnel.
- Costs involved in linkage with and dissemination of research findings to those who use the results such as researchers, the public, practitioners and policy communities, and the industrial sector.
- Publication costs.

**Application Process**
The application process for this funding opportunity is comprised of an optional information session and two mandatory steps: Step 1 - Letter of Intent; Step 2 - Full Application.

- LOIs and full applications must be submitted to CBCF. LOI's must be submitted using the CBCF’s Electronic Grant Management System. More information about how to submit an application online will be provided to relevant applications following the LOI stage.

\(^3\) [http://www.cihr-irsc.gc.ca/e/204.html](http://www.cihr-irsc.gc.ca/e/204.html)
Reminder to applicants: Please ensure that your application is complete (includes all required signatures) and is submitted by the application deadline to CBCF.

Information Session

On May 30th CBCF, in collaboration with CIHR, will host a webinar for interested applicants. Although not mandatory, potential applicants are strongly encouraged to participate in the information session. To register for the Webinar, please click here. Instructions on how to register for the information session are also posted on the CBCF website.

Step 1 - Letter of Intent

Letters of Intent will be reviewed for relevance to the intent of the RFA, by CBCF and CIHR-ICR staff. Principal Applicants with relevant LOI's will be invited to submit a full application and will be considered for a Planning Grant. The applicants must consent to the sharing of nominative information for the purposes of relevance review at the time of application to be eligible for funding. All titles should be non-confidential. The Principal Applicant, Program and Subproject titles of successful LOI's will be posted on the CBCF website; applicants must consent to making this information public.

The Letter of Intent must include the following components:

- Overall description of the research Program (max. ~4 pages, 10,000 characters, not including references) including the following elements:
  - A Program title.
  - A brief introduction and background.
  - Program theme and objectives.
  - Description of the subprojects (minimum three) and the anticipated added value of the subprojects to the overall program, i.e. how the sum of the whole will be greater than the individual parts.
  - An outline of how the Program will overcome geographic, numerical, and/or interdisciplinary challenges to access sufficient resources (patient cohorts, clinical data, biorepositories etc) to support statistically meaningful studies (as applicable).
  - Outline of plans for the translation of research outcomes across Canada to ensure pan-Canadian impact, including an approach for establishing a base-line against which impact will be measured.
  - A description of new resources to be created under the Program, and existing resources to be leveraged through collaboration as applicable.
  - A governance plan for management and coordination of the overall Program.
  - Certifications and signatures from the nominated corresponding Program Principal Applicant and Program Host Institution.

- A brief summary for each independent sub-project (max. ~1 page each, 3,000 characters). The summary should include the following:
  - The title of the independent project.
  - The name of the sub-project Principal Applicant and sub-project host institution and names of all other sub-project applicants participating in the project (need not be final at the Letter of Intent stage).
  - Background.
  - Objectives.
• Summary of research plan.
• A description of how the sub-project will integrate with and contribute to the overall Program.
• Certifications and signatures from all named sub-program applicants.

Planning Grant application (optional)
Planning grant funds may be used for organizing and holding meetings and workshops, establishing the program baseline and comparative measures, covering costs of consultants or proposal writers, networking activities or any other activity to support collaboration and planning and preparing of the Program proposal. Applicants requesting a planning grant must provide the following:
• A brief outline (max. ~1 page, 3,000 characters) of the activities to be funded by the development grant and budget justification; and,
• A completed budget form detailing amounts for each eligible expense type.

Step 2 - Full Application

In the full application, sub-projects descriptions and aims should be broken down so that they are clear and are presented in a logical order that a reviewer could easily refer back to when evaluating other sections of the proposal (i.e., budget justification).

The Research Proposal should provide a clear, concise description of the research for which funding is being requested. The page limits outlined below do not include appendices. Legends should be succinct and should not contain detailed information pertaining to methods. Appendices may include items such as, references, tables, charts, figures, photographs, questionnaires, and consent forms.

The full application must include the following components:

A) **Program Overview** (approximately 10 pages, 30,000 characters, not including charts, tables, figures, photographs and references)

The **Program Principal Applicant** will be asked to provide the following information:
• An overview of the Program that includes a description of the priorities, objectives, scope and vision of the overall Program;
• A brief summary of previous work on this or any other closely related program by the Applicants, with reference to relevant publications;
• A brief summary of current knowledge relative to the proposed research, including results with bearing on the program by other Applicants, with reference to relevant publications;
• Description of the overall program including sub-projects and any core resources, including how interrelated and synergistic the sub-projects are in their work towards a common goal. The overall Program must have the potential to achieve much more than the simple sum of its component projects. Include descriptions of the networking and coordination activities that will promote collaboration and integration among the sub-projects;
• The names and qualifications of the participating personnel listed together with an indication of the extent of their participation and a clear description of their roles (detailed fully in budget justification);
• A clear description of the proposed governance structure for the Program including Program leadership and organization structure, decision and issues management processes, host institution and institutional agreements, joint publishing and acknowledgement plans;
• Any other information deemed important by the Program Principal Applicant;
A list of references, which must include the names of all authors, the full title and the full journal citation. This list is excluded from the 5-pages limitation;

Recommended reviewers.

Sub-Projects (max. ~10 pages, 30,000 characters per project, not including charts, tables, figures, photographs and references)
For each sub-project, a full description of the proposed research must be provided. Each sub-project must be clearly identified and must provide the following information:

- A brief summary of previous work or progress on this or any closely related project by the Applicant(s) or other Applicants with reference to relevant publications;
- A brief summary of current knowledge relative to the proposed research, and a logical flow from background to proposed work;
- A clear and detailed description of the proposed experiments, including:
  - techniques to be used and methods and procedures
  - conceptual framework
  - specific hypothesis
  - complete and specific analysis plan
- knowledge dissemination plan if appropriate
- Project Synergy: Describe how interrelated and synergistic the project is in the work towards a common goal. The overall program must have the potential to achieve much more than the simple sum of its component projects;
- An estimate of the time required to complete the proposed aims;
- A proposed budget for the sub-project
- The names and qualifications of the Applicant team listed together with an indication of the extent of their participation and a clear description of roles of personnel (detailed fully in budget justification).

B) Lay summaries of Research Program and Sub-Projects (max. 1500 characters)
The Program and each sub-project application must include a brief lay summary of the research proposal, which will be used to describe the projects to CBCF and CIHR stakeholders and the general public. The lay summary must explain, in plain English, why each is being proposed, who is involved, how it will be done, what it will accomplish and how it will contribute to the overall Program, or in the case of the Program, how it will solve an overarching problem by bringing the sub-projects together.

Please include in your narrative, a description of how the projects relate to the CBCF’s Vision, Mission and Program Objectives, the specific contribution to breast cancer research and/or care, and the vision of the immediate and/or future impact of these lines of investigation on breast cancer.

C) Scientific Abstract of Research Proposal (max. 1500 characters)
Each sub-project application must include a brief scientific abstract of the research proposal, which will be examined by the peer review committee as an integral part of the application. The abstract must include the following sections:

- Title of sub-project;
- Description of the problem to be investigated, the objectives of the proposed research, and the proposed methodology.

D) Budget Information and Supporting Documents
The Program and each sub-project application must submit the requested budget information and supporting documents.

Specific Instructions for the Program Principal Applicant

- Applicants will be asked to provide budgets for the Program and each sub-project justifying all budget items (cash and in-kind). The total amount requested for the Program and all its sub-projects can be up to $1.2 million per year.
- You must include a budget for each year funds are requested.

E) Appendices

Appendices may include items such as references, tables, charts, figures, photographs, questionnaires and consent forms. An updated applicant table should be attached. The maximum number of supporting documents to be appended is 10 for the Program Grant application and 3 for each Sub-Project, not including letters of collaboration, certifications and signatures. Letters of collaboration are mandatory for each collaborator.

Note 1: For the purpose of peer review, the research proposal should not depend on information in the Research Proposal appendix, other than references, tables, charts, figures and photographs that are not included in the page limit of the research proposal. Reviewers are under no obligation to read the Research Proposal appendix other than to view references, tables, charts, figures and photographs.

Peer Review Process

The application will be evaluated as a single integrated Program that includes overarching resource, theme or structural elements, and the proposed sub-projects. In addition, each sub-project will be evaluated for its own scientific merit and for its contribution to the Program as a whole. Each sub-project must pass peer review. In the event that a sub-project fails peer review, it will be at the discretion of the peer review panel to decide if the Program as a whole is still viable without this component.

A largely international peer review panel will be convened to review the full applications. The review panel meeting will involve an interactive review of the proposal at which the Program leader as well as the leaders of the individual sub-projects and any coordinating resources will be invited to address the review committee, in person, and respond to questions. The most highly rated and ranked application, as determined by the peer review panel will be recommended to CBCF and CIHR-ICR for a final decision on funding.

Evaluation Criteria

To support the objectives of this funding opportunity, the following factors will be considered:

Impact of the Research Program

a. Potential for enhancing understanding and improving the clinical outcomes and quality of life for young women with breast cancer.

b. Appropriateness of the proposed strategies for transforming, translating, mobilizing, or otherwise realizing positive change and impact through the utilization of research findings.

c. Feasibility of the Program and the potential for sustaining the Program beyond the five year funding period of this grant.
Research Approach
a. The excellence of the proposed research.
b. The extent to which the research Program and its sub-projects demonstrate clear priorities, objectives, scope and vision, which are well aligned.
c. How well the team has demonstrated synergies between individual sub-projects that contribute to a coherent research Program and the extent to which they address the Program's overall vision.
d. How appropriate the roles and contributions of all applicants are in the planning, execution, and evaluation of the research program.
e. The extent to which each sub-project is able to stand as an independently-fundable research project but, at the same time, is contributing substantially to the primary research goal of the Program.
f. The extent to which the literature review is complete and how relevant it is to the proposed study design/research plan.
g. Whether the team has adequately addressed anticipated difficulties that may be encountered in the research and plans for management.
h. Whether the team has a sound plan to establish Canadian benchmarks against which to measure outcomes and success with respect to improved clinical outcomes for young breast cancer patients.

Program Proposal
a. The extent to which the proposed Program will bring added value in addressing the challenges in early onset breast cancer, and the speed and efficiency with which new knowledge will be generated, or translated into improvements in health or the health care system, through the new directions of research proposed by the team.
b. The extent to which the proposed collaborations between researchers from various disciplines are complementary.
c. The extent to which the contribution and effectiveness of the proposed Program resources and structure will contribute to the cohesiveness of the Research Program.
d. The appropriateness of the governance plan, including strategic leadership and administrative oversight.

Applicant(s)
a. Proven leadership capabilities, experience, scientific and administrative expertise, and time commitment of the leading Program Principal Applicant for the overall coordination and administration of the research Program.
b. Specific contribution of each applicant and track record of applicants of having participated in, and/or having provided leadership to collaborative research teams.
c. Track record of applicants’ creativity and originality in breast cancer research.
d. Contribution of sufficient time to the Program grant by each individual applicant to ensure the achievement of its research objectives.

Notification of Decision
Following peer review and formal decision by the CBCF National Board of Directors, all applicants will receive written notification of decision and detailed feedback from the peer review panel.

Performance Measurement
CBCF and CIHR are committed to collecting and disseminating information on the outputs and impacts of the research they fund. Reporting requirements are as follows:
➢ The Program Principal Applicant will be required to submit a final electronic report. The reporting forms will be made available to the Program Principal Applicant at the beginning of the funding period and can be filled in as the research progresses.

➢ The Program Principal Applicant and sub-project Principal Applicants must contribute to the monitoring, review and evaluation of CBCF and CIHR programs, policies and processes by participating in evaluation studies, surveys, workshops, audits and providing data or reports as required for the purpose of collecting information to assess progress and results.

➢ The Program Principal Applicant and sub-project Principal Applicants must also encourage their associates, trainees and administration to participate in the monitoring, review and evaluation of CBCF and CIHR programs, policies and processes as required.

➢ In addition to the CBCF and CIHR standard guidelines and requirements, the following special requirements shall apply:
  o The Program Principal Applicant will be expected to organize and attend annual scientific and networking meetings of the Program to ensure the seamless functioning of the Program as a whole,
  o The Program Principal Applicant will be required to submit, to CBCF, annual written progress reports, as well as lists of publications resulting in whole or in part from the Program grant. A template for these reports will be provided by CBCF. CBCF will share all progress and final reports with CIHR.

**Contact Information**
For questions on CBCF funding guidelines, how to apply, and the peer review process contact:

National Grants Program  
Canadian Breast Cancer Foundation  
Telephone: 1.866-373- 6313 ext 410  
Fax: 416-815-1766  
Email: nationalgrants@cbcf.org

For questions about this initiative and research objectives contact:

Brian Bobechko  
Senior Director, National Grants and Partnerships  
Canadian Breast Cancer Foundation  
Telephone: 1-866-373-6313 ext 305  
Fax: 416-815-1766  
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Canadian Institutes of Health Research  
Telephone: 613-954-7223  
Fax: 613-954-1800  
Email: judith.bray@cihr-irsc.gc.ca
Partner Description

**Canadian Breast Cancer Foundation**
The Canadian Breast Cancer Foundation is Canada’s leading community-driven breast cancer charity dedicated to funding relevant and innovative research and supporting and advocating for the breast cancer community. The Foundation has developed a National Grants Program that provides funding for research in areas of strategic priority. The National Grants Program is also an opportunity to engage funding partners around areas of common research interests including the priorities of the National Breast Cancer Research Framework. The current funding opportunity is focused on addressing the need for more research specifically focused on the challenges associated with Breast Cancer in Young Women.

**Canadian Institutes of Health Research (CIHR)**
The Canadian Institutes of Health Research (CIHR) is the Government of Canada’s health research investment agency. CIHR’s mission is to create new scientific knowledge and to enable its translation into improved health, more effective health services and products, and a strengthened Canadian health care system. Composed of 13 Institutes, CIHR provides leadership and support to more than 14,100 health researchers and trainees across Canada.

The Institute of Cancer Research (ICR) is one of 13 institutes of the Canadian Institutes of Health Research (CIHR); the Government of Canada’s health research investment agency. ICR is dedicated to supporting research that reduces the burden of cancer on individuals and families through prevention strategies, screening, diagnosis, effective treatment, psycho-social support systems, and palliation. ICR also has a mandate to steward $3 million in funding for breast cancer research for strategic advancement in reducing the incidence of breast cancer, its mortality rate, and to improve the lives of women who have the disease, as part of the Public Health Agency of Canada’s ongoing support for the Canadian Breast Cancer Initiative.