

# Intramural Research Grant Program Guidelines

These Guidelines describe the requirements for the Canadian Blood Services Intramural Research Grant program. The Intramural Research Grant program terms and conditions may be altered without notice. Applicants should always refer to the latest edition of the Guidelines.

## **I. GENERAL INFORMATION AND PRIORITIES**

Canadian Blood Services manages the national supply of blood, blood products and stem cells, and related services for all the provinces and territories (excluding Quebec). We also lead an integrated, interprovincial system for organ donation and transplantation for all of Canada. Through our Centre for Innovation, we facilitate the creation, translation and application of new knowledge to support a safe, effective and responsive system of blood and related biological products for Canada.

The objective of the Intramural Research Grant program is to support research that will advance knowledge in specific research priorities, as described below. Increasing the stock of knowledge underpinning blood transfusion and blood-related stem cell transplantation practices will lead to new discoveries that will improve the safety and efficacy of blood products and the blood system in general. The research supported through the Intramural Research Grant program will contribute to Canadian Blood Services reaching its overall goal of attaining excellence in the manufacturing and distribution of biological products and in the provision of clinical services and will contribute to Canadian Blood Services corporate strategy of improving patient outcomes and continually earning the right to serve the health care system.

Research Priorities:

- Promoting appropriate blood product utilization;
- Ensuring an adequate blood product supply;
- Minimizing the adverse effects of blood product transfusion;
- Optimizing blood product quality;
- Replacing or improving blood products through new therapies or technologies.

Blood product is defined as a therapeutic product derived from the donation of blood or blood components. Blood products include red blood cell and platelet concentrates, plasma and plasma derivatives (including plasma protein products), and hematopoietic stem cells (including those derived from cord blood). At this time, applications focusing predominantly on therapies that do not involve blood products will only be considered if a convincing case is made that the research addresses one of the research priorities stated above.

Another objective of the Intramural Research Grant program is to support and maintain a network of researchers who are dedicated to addressing the needs of Canadian Blood Services. As such, the program requires a minimum of two investigators per team and a minimum of two Canadian Blood Services affiliated investigators.

The Intramural Research Grant program competition is held annually. For the 2018 competition, the total amount available is \$1,200,000, and it is expected that up to three (3) new grants will be funded.

## II. ELIGIBILITY

- **Principal Investigator:** The Principal Investigator must be affiliated with Canadian Blood Services as a Canadian Blood Services Scientist, Medical Officer/Director/Consultant, or Adjunct Scientist. The Principal Investigator is responsible for submitting the application, delivering the project as approved, and reporting on project progress to Canadian Blood Services.
- **Team size:** The research team must include at least two investigators (including the Principal Investigator).
- **Team composition – Canadian Blood Services affiliates:** The research team must include a minimum of two investigators that are affiliated with Canadian Blood Services (i.e. Canadian Blood Services Scientist, Medical Officer/Director/Consultant, or Adjunct Scientist), and one of the two must be a Canadian Blood Services Scientist or Medical Officer/Director/Consultant (i.e. teams must not be comprised exclusively of Adjunct Scientists).
- **Team composition – non-Canadian Blood Services affiliates:** The research team may be supplemented with investigators and collaborators that are not affiliated with Canadian Blood Services.
- All investigators must have a defined role in the project, and their expertise must be clearly required to adequately address the project goals.
- All investigators must be affiliated with a Canadian academic program as faculty members.
- Collaborators with a defined role in the project may complement the team. The collaborator's role in the research project is to provide a specific service (e.g., access to equipment, provision of specific reagents, statistical analysis, etc.). Collaborators are not eligible for funds through the Intramural Research Grant program.
- **Research priorities:** Intramural Research Grant proposals must be aligned with one or more of the research priorities identified in Section I. Proposals that are not relevant to any of these priorities will not be considered for funding.
- **Budget:** The proposed project budget must not exceed \$200,000 per year for a maximum duration of two years (\$400,000 total).
  - Funds cannot be used for salary support for investigators (i.e. individuals who are eligible to apply for operating funds from the federal agencies).
  - Funds may be used for trainee stipends, research staff salaries (e.g. research assistants, technicians, etc.), expendable materials and supplies, and the purchase and maintenance of experimental animals.
  - Travel expenses will be supported to a maximum of \$3000 per year.
  - The purchase of small items of equipment is permissible; however, the maximum that can be spent on equipment over the two year grant funding period is \$8500 (exclusive of applicable taxes). Funds cannot be used towards maintenance/service contracts.
  - Intramural Research Grant funds are only to be used towards the direct costs of research; no funding is to be used for indirect costs (e.g. institutional overhead).

## III. APPLICATION PROCESS

The application process for the Intramural Research Grant program is comprised of two phases: Registration and Application.

### i) Registration Phase

- Complete the Canadian Blood Services Intramural Research Grant Registration Form as per the instructions outlined in the Registration Form.

- Submit the Registration Form by email to Centre for Innovation at [centreforinnovation@blood.ca](mailto:centreforinnovation@blood.ca) on or before the deadline, as per the Instructions in the Registration Form. **No registration forms will be accepted after the deadline.**
- Canadian Blood Services will acknowledge receipt of the Registration Form by email. **It is the responsibility of the applicant to ensure the Registration Form has been received by Canadian Blood Services.** Please contact the Centre for Innovation if your Registration Form is not acknowledged.
- An administrative review of the Registration Forms will be performed by Centre for Innovation staff to assess that basic eligibility criteria have been met (see Section II). The information provided in the Registration Form will be used by Centre for Innovation staff to determine the expertise required to review applications.
- Canadian Blood Services will contact all registrants and provide the full Application Form to those who meet the basic eligibility criteria. No feedback on the proposed project will be provided to the registrants.
- Applicants are encouraged to submit their Registration Form in advance of the deadline; administrative review will be performed within five (5) business days of receipt of the Registration Form.

Applicants must submit a Registration Form in order to receive the full Application Form.

## ii) Application Phase

Eligible applicants who have completed the Registration Form will be invited, by email, to submit a full grant application. **Unsolicited applications will not be accepted.**

- Complete the Canadian Blood Services Intramural Research Grant Program Application Form and prepare the supporting documents for the Application Package, as per the Instructions in the Application Form.
- Submit the Application Package (Application Form and supporting documents) by email to Centre for Innovation at [centreforinnovation@blood.ca](mailto:centreforinnovation@blood.ca) on or before the competition deadline, as per the instructions in the Application Form. **No applications or additional material will be accepted after the deadline.**
- The duly received Intramural Research Grant Program Application Package constitutes an agreement to adhere to the conditions governing the grant.
- Canadian Blood Services will acknowledge receipt of the Application Package by email. **It is the responsibility of the applicant to ensure the Application Package has been received by Canadian Blood Services.** Please contact the Centre for Innovation if your Application Package is not acknowledged.

## IV. REVIEW PROCESS

All applications will be subjected to rigorous peer review by experts external to Canadian Blood Services. The evaluation of applications is as follows: (1) written evaluations are obtained from subject matter experts external to Canadian Blood Services; and (2) applications and written evaluations are discussed and evaluated at a face-to-face Grant Review Panel meeting.

### i) Intramural Research Grant Review Panel Composition

A Grant Review Panel (“Review Panel”) composed of subject matter experts will be convened by Canadian Blood Services. The Review Panel will comprise a Chair and 2 – 4 additional members, depending on the number and nature of applications received for the competition. Review Panel members will be selected by the Centre for Innovation Director or above. The Chair will be selected from

the ranks of previous Review Panel members. Canadian Blood Services will make the identity of Review Panel members available to all applicants following the announcement of funding decisions.

## ii) Evaluation Criteria

Applications are reviewed to identify those with the highest scientific merit and with the greatest likelihood of success in generating novel and timely knowledge relevant to one or more Research Priorities.

The feasibility of the research, the relevance, significance and impact of the research, and the project team will all be considered in the application evaluation. Considerations for the criteria are as follows:

### Feasibility of the Research:

- Are the overall strategy, methodology, and analyses appropriate to accomplish the specific aims of the project?
- Are the timelines and related deliverables of the project realistic?
- Does the proposal identify potential challenges and appropriate mitigation strategies?

### Relevance, Significance and Impact of the Research:

- Are the objectives of the project aligned with the Research Priorities?
- Do the objectives respond to identified needs?
- Will the project produce new data and concepts and advance the state of knowledge?
- Are the anticipated project contributions likely to lead (in the short and/or long term) to improved safety and efficacy of blood products and/or the blood system?

### Project Team:

- The expertise of the investigators in the proposed area of research and with the proposed methodology.
- The expertise of the investigators as demonstrated by scientific productivity over the past five (5) years.
- The appropriateness of the project team to carry out the proposed research in terms of complementarity of expertise and synergistic potential.
- The level of engagement and/or commitment from the investigators and collaborators.

Applications will be assessed on a common adjudication scale:

Range	Description
4.5 – 5.0	An outstanding proposal that communicates a sound and creative experimental plan with a high likelihood of important knowledge generation. Short-comings are minimal.
4.0 – 4.5	An excellent proposal that communicates a sound and creative experimental plan with a likelihood of important knowledge generation. Improvements possible.
3.5 – 3.9	A very good proposal with meritorious aspects that should be funded if sufficient resources permit. Some improvements necessary.
3.0 – 3.4	A good proposal with deficiencies that could be improved in a resubmission but is not fundable as currently presented. Improvements necessary.
2.6 – 2.9	A fair proposal that should not be funded. Major revisions required.
0 – 2.5	A poor proposal that fails to provide convincing information and/or has serious inherent flaws or gaps.

The application's budget will also be assessed but will not influence the overall application evaluation. Reviewers will be required to assess if the requested budget is appropriate to support the proposed project and is well-justified.

### **iii) Review Process**

Canadian Blood Services will obtain up to three written reviews for each application from subject matter experts external to Canadian Blood Services and the Review Panel.

The Chair of the Review Panel will assign two Review Panel members to review each application, one as primary reviewer and the other as secondary reviewer. Assignments will be made based on the subject matter of the applications in relation to the expertise of the Review Panel members. Both reviewers will prepare written reviews in advance of the Review Panel meeting.

The Chair will convene and oversee the Review Panel meeting. For each application, the Chair will invite the primary and secondary reviewers to announce their preliminary scores. The Chair will then invite the primary reviewer to present the salient features of their review to the Review Panel and to justify their preliminary score. The secondary reviewer will then be invited to identify any review features that differ from that of the primary reviewer and to address any additional points made in the written reviews obtained from the external reviewers. Both reviewers will also be invited to identify any budgetary concerns.

The primary and secondary reviewers will arrive at a consensus score and answer any questions from other Review Panel members. Once a consensus score is reached, all Review Panel members will score the application within  $\pm 0.5$  of the consensus score by secret ballot.

The mean scores of all Review Panel members will be used to rank the applications. Applications with a mean score below 3.5 will not be considered for funding. If there are any ties in the mean score of the applications in the fundable range, ties will be broken by consensus. The Chair will then return to the issue of budgetary concerns, to secure agreement on any financial reductions to proposals in the fundable range.

The Chair will moderate all Review Panel discussions, ensure a fair and timely process, and be responsible for communicating the final rankings and comments of the Review Panel to Canadian Blood Services. In addition, the Chair will summarize the recommended budgets for each application. The Chair shall communicate any issues of concern raised by the Review Panel in the same manner.

The Chair's recommendations will be used to make funding decisions by the Director, Centre for Innovation or above, which will be subject to final approval by the Chief Medical and Scientific Officer or equivalent.

Decisions will be communicated in writing to all applicants in a timely manner following the Review Panel meeting. Applicants will be provided with all reviewers' written evaluations (anonymized).

## **V. GENERAL TERMS AND CONDITIONS OF THE GRANT**

### **START DATE**

The Intramural Research Grant should begin within six (6) months of October 1 2018.

### **USE OF FUNDS**

Intramural Research Grant funding may be used for the payment (salary and benefits, where applicable) of research staff (e.g. research assistants or technicians), the payment (stipend and benefits, where applicable) of research trainees (e.g. post-doctoral fellows, graduate students, or summer students), the purchase of expendable materials and supplies, the purchase and maintenance of experimental animals,

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and the purchase of small items of equipment (totaling less than \$8500 per grant). Intramural Research Grant funding may also be used for the payment of contracted services on a fee for service basis (e.g. statistical support), but under no circumstances may a Principal Investigator, Co-Investigator, or Collaborator be personally remunerated. Travel expenses for the purposes of presenting research results generated from the grant at conferences or for other research purposes will be supported to a maximum of \$3000 per annum per grant, under the terms of the Canadian Blood Services Travel Policy.

Canadian Blood Services supports only the direct costs of research. No funding is to be used for indirect funds for institutional overhead.

### **CONDITIONS OF FUNDING**

The grantee must respect any limitations placed on the use of Intramural Research Grant funds as outlined in the formal notification of decision.

Canadian Blood Services will terminate support if the Principal Investigator terminates his or her relationship with the organization, unless a co-investigator with a relationship with Canadian Blood Services makes a formal written request to the Centre for Innovation, to take on the role for the balance of the granting period.

The grantee must immediately notify the Centre for Innovation, of their inability, for any reason, to carry out or complete the research for which a grant was received.

Should Canadian Blood Services funding levels not be available or are decreased due to unforeseen circumstances, Canadian Blood Services reserves the right to reduce, defer or cancel funding of grants received through this funding opportunity.

### **REVISION TO RESEARCH PLAN**

Prior written approval from the Centre for Innovation is required for a significant change in the scope, methodology, or nature of a funded project, for a deviation from the conditions of the grant, or for a change in principal investigator.

### **LICENSES AND CERTIFICATES**

Canadian Blood Services attaches great importance to the ethical acceptability of experimental studies. Appropriate research ethics certificates must be obtained and documentation provided to the Centre for Innovation, prior to undertaking any parts of the research plan involving human or animal experimentation or research involving the use of biohazardous agents (especially human pathogens and toxins) or radioisotopes. No funds for such experiments will be released in the absence of such documentation, in accordance with Canadian Blood Services Research and Development Funding Policy.

### **RESEARCH INTEGRITY**

Grantees must follow and abide by Canadian Blood Services Integrity in Scholarship and Research Policy.

### **OWNERSHIP**

Any materials, supplies, or minor equipment purchased with Intramural Research Grant program funds remain the property of Canadian Blood Services at the completion of the project or at the termination of support.

### **INTELLECTUAL PROPERTY RIGHTS**

Any intellectual property arising from activities supported by Canadian Blood Services, including the Intramural Research Grant program, is governed by the Canadian Blood Services Intellectual Property Policy.

## **PROGRESS REPORTS**

Progress reports detailing scientific findings and project accomplishments are due annually in March for the duration of the grant. A final report is due within one (1) month of the grant end date. Additional progress reports may be requested during the tenure of the grant. A progress report template will be provided.

## **PUBLICATIONS**

Grantees are encouraged to publish the results of work carried out during the tenure of their grant but must be compliant with the Canadian Blood Services Intellectual Property and Non-Disclosure Policy. Any publications, reports or public presentations resulting from work conducted with an Intramural Research Grant must acknowledge the support of Canadian Blood Services and Health Canada. Detailed instructions on acknowledging support from the Intramural Research Grant Program will be provided.

## **VI. FINANCIAL ADMINISTRATION OF GRANT FUNDS**

Financial administration of the Intramural Research Grant funds will be through the Canadian Blood Services' Centre for Innovation. Canadian Blood Services' Centre for Innovation will instruct Canadian Blood Services' Finance Services to transfer the approved funds to the grantee's institution or cost centre. The grantee and its institution are responsible for administering the funds according to the guidelines set-out in this document and for financial reporting on expenditures using Form 300 or equivalent to Canadian Blood Services.

Grantees are expected to exercise appropriate stewardship over the financial resources entrusted to them from the Intramural Research Grant program. In no circumstances shall the total disbursement exceed the funds available for each grant.

Funds unspent in the first year of a two year grant shall be systematically carried over into the second year. Requests to extend resources remaining in an Intramural Research Grant account into a third year must be made to the Centre for Innovation in accordance with Canadian Blood Services Research and Development Funding Policy.

## **VI. CONTACT AND ENQUIRIES**

Enquiries should be addressed to the Centre for Innovation, [centreforinnovation@blood.ca](mailto:centreforinnovation@blood.ca) or (613) 739-2496.