##### Intramural Research Grant Program 2020 Application Form

###### Overview

Applicants are advised to review the Canadian Blood Services’ Intramural Research Grant Program Guidelines to ensure alignment of their applications with the program objectives, research priorities and eligibility criteria.

The complete application package must be delivered to Canadian Blood Services by 11:59 PM April 10, 2020.

###### Instructions

It is the Applicant’s responsibility to ensure that all documents are delivered by the application deadline. **No applications or additional material will be accepted after this deadline. Late or incomplete applications will not be considered.**

Applicants must have completed a Registration Form and be invited by email to submit an Intramural Research Grant application. Unsolicited applications will not be accepted.

All documents must be delivered **by email** **to** [centreforinnovation@blood.ca](mailto:centreforinnovation@blood.ca).

The submitted application package must include the following documents:

1. **Completed Application Form:** Ensure that all fields are complete, including signatures, before submitting the application. **Page/space and word count limitations must be adhered to**. Sections of the application that exceed the identified limits will not be considered.
2. **Supporting Documents**
   1. **Project Team Members’ CVs:** A Canadian Common CV (<https://ccv-cvc.ca/>) in the **CIHR Academic format** must be provided for the Principal Investigator and for all Co-Investigators. CCVs should be appended to the application.
   2. **Letters of Collaboration:** A letter of collaboration must be provided by each collaborator involved in the project. Letters of collaboration should be appended to the application.

###### Section A: General Information

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| **PROJECT TITLE** | | |
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| **PRINCIPAL INVESTIGATOR** | | |
| Family Name: |  | |
| Given Name(s): |  | |
| Institution: |  | |
| Phone: |  | |
| Affiliation with Canadian Blood Services: |  | |
| Email: |  | |
| **CO-INVESTIGATOR(S)**  **Co-Investigators** are expected to contribute to the research program, and their expertise must be clearly required to address the project goals. Co-Investigators are expected to require material budget items of some nature. | | |
| **Name (Last name, First name)** | | **Institution and/or Affiliation with Canadian Blood Services** |
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*Insert rows as needed.*

\*A project team must include a minimum of two investigators (including the Principal Investigator) and at least one of the investigators must be affiliated with Canadian Blood Services (i.e. Canadian Blood Services Scientist, Medical Officer/Director/Consultant, or Adjunct Scientist).

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| **COLLABORATOR(S)**  **Collaborators** are individuals whose 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 requesting a budget from Canadian Blood Services. | |
| **Name (Last name, First name)** | **Institution** |
|  |  |
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*Insert rows as needed.*

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| --- | --- |
| **INSTITUTION** | |
| Institution(s)/Organization(s) where research will be conducted: |  |
| Name of Institution(s) that will administer the funds (PI institution paid): |  |

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| **AGREEMENT** | |
| The undersigned acknowledge that the enclosed application for research funding from Canadian Blood Services represents a study for which the Principal Investigator was responsible for the proposal development. If funded, the Principal Investigator will assume primary responsibility for the implementation and performance of the proposed study.  The undersigned agree that the general conditions governing the Intramural Research Grant Program, as set out in the Guidelines, are accepted by the Principal Investigator on behalf of the project team and the institution(s).  Signatures: | |
| Principal Investigator | Head of department at PI institution paid |
| Name:  Date: | Name:  Date: |

###### Section B: Project Team

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| **PROJECT TEAM ROLES** |
| **In the space provided below**, outline the role of the Principal Investigator and Co-Investigator(s) in the proposed study, specifically addressing the scientific and/or technical expertise each will bring to the proposed project, and the proposed division of scientific labour within the team. If applicable, elaborate on the contributions of collaborators.  In a separate file, provide a full Canadian Common CV (<https://ccv-cvc.ca/>) in the **CIHR Academic format or equivalent** for the Principal Investigator and all Co-Investigators. If applicable, provide a letter of collaboration from each collaborator. |
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###### Section C: Project Information

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| **PROJECT ABSTRACT** |
| Provide a summary (**200 words max.**), in **lay terms**, of the proposed project, highlighting project objectives and deliverables and describing how the research is aligned with the Intramural Research Grant Program’s objective, including identified Research Priorities. If the project is approved, **this summary may be published on Canadian Blood Services’ website.** |
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| **RELEVANCY TO RESEARCH PRIORITY AREAS** |
| **In the space provided**, provide a description of how the proposal addresses one or more of the Research Priority Areas (RPA) identified for this competition. This justification should include how the research could assist Canadian Blood Services in reaching its overall goal of attaining excellence in the manufacturing and distribution of biological products and in the provision of clinical services, and how it fits into the Canadian Blood Services corporate strategy of improving patient outcomes and continually earning the right to serve the health care system.  **RPA 1: Promoting appropriate blood product utilization**  **RPA 2: Ensuring an adequate blood product supply**  **RPA 3: Minimizing the adverse effects of blood product transfusion**  **RPA 4: Optimizing blood product quality**  **RPA 5: Replacing or improving blood products through new therapies or technologies** |
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| **SUMMARY OF RESEARCH PROPOSAL** |
| **In the space provided,** provide a clear and concise description of the broad goals(s) of the proposed research and specific aims, including a description of the objective(s), hypothesis, and research plan for the two (2) year proposal. |
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| **SUMMARY OF PROGRESS** |
| **In the space provided,** provide a summary of progress in research activities related to the proposal and, for applications following a currently funded Intramural Research Grant, the progress attributable to the previous Intramural Research Grant. |
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| **RESPONSE TO PREVIOUS REVIEWS** |
| **Two (2) pages maximum.** If this application is a resubmission of a previously unsuccessful grant application, use this space to respond to previous reviewers’ comments. The response should stand alone and should not require reference to any other document, because reviewers will not have access to previous application information. As such, briefly describe the weaknesses identified by previous reviewers in order to respond to them. |
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| **RESEARCH PROPOSAL** |
| **In ten (10) pages maximum** (not including appendices):   1. Describe the proposed research (central hypothesis, research question, specific objectives); 2. Describe the proposed research methodology and/or assays and outline any preliminary data; 3. Describe the relevance of the proposal to the Intramural Research Grant Program’s objectives and identified Research Priorities; 4. Describe how the proposed research could be translated into changes in transfusion service or transfusion medicine practice; and 5. Identify any potential pitfalls and outline how the project goals will be achieved if pitfalls are encountered (work plan, timelines, analysis and interpretation of results).   Appendices not exceeding **five (5) pages** and containing references, tables, charts, figures and photographs may be included **in addition** to the ten (10) page limit. Legends must be succinct. Detailed descriptions of methods and discussion of results should be included in the body of the proposal, not in the legends or in an appendix. |
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| **RELEVANT PUBLICATIONS** |
| A maximum of **three (3)** published or submitted articles relating to progress, plus a maximum of **two (2)** published articles substantiating the subject matter expertise of the Principal Investigator and Co-Investigators may be appended to the application. Submitted articles must be accompanied by proof of submission to a journal.  List all appended articles in the space below. |
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| **HEALTH AND SAFETY CERTIFICATION** | | | |
| Indicate if the proposal involves the following. Note that this information is used for administrative purposes to ensure that research ethics approvals are in place prior to the release of funds to successful applicants. This information is not used to evaluate the merit of the application. | | | |
| Biohazards | | | |
| Pathogenic agents | | Yes  No | |
|  | Containment level required: 1 2 3 4 none | | |
| Recombinant genetics | | Yes  No | |
|  | Containment level required: 1 2 3 4 none | | |
| Radioisotopes | | Yes  No | |
|  | Containment level required: 1 2 3 4 none | | |
| Human Experimentation | | | |
| Has ethics approval been applied for or obtained? | | | Yes  No  Not applicable |
| Animal Experimentation | | | |
| Has ethics approval been applied for or obtained? | | | Yes  No  Not applicable |

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| **SEX AND GENDER** | |
| Sex and gender must be considered when developing the research proposal. Visit the [CIHR](http://www.cihr-irsc.gc.ca/e/32019.html) website for resources to help with incorporating sex and gender into research design. | |
| Are sex (biological) considerations taken into account in this proposal? | Yes  No |
| Are gender (socio-cultural) considerations taken into account in this proposal? | Yes  No |
| Describe how sex and/or gender considerations will be considered in your research proposal: | |
|  | |

###### Section D: Budget

Within this section, outline the budget requested and provide justification that the requested resources are appropriate to financially support the research project as described in the application. Review the ‘Use of Funds’ in the Intramural Research Grant Program Guidelines to become familiar with the eligible and non-eligible expenses under this program.

The grant funding will be released in three installments according to Canadian Blood Services’ fiscal year (Typically Installment 1: October 1 2020 – March 31 2021, Installment 2: April 1 2021 – March 31 2022, and Installment 3: April 1 2022 – September 30 2022 *(or later depending on project start date)*). **Please complete the tables below according to the Canadian Blood Services’ fiscal year.**

Budget Overview

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| --- | --- | --- | --- |
| **TOTAL GRANT BUDGET REQUESTED:** | | **$** | |
| **Investigator Name** | **Installment 1** | **Installment 2** | **Installment 3** |
|  | $ | $ | $ |
|  | $ | $ | $ |
|  | $ | $ | $ |
| **TOTAL** | **$** | **$** | **$** |

*Insert rows as needed.*

Installment 1:For the period October 1 2020 – March 31 2021 (Note: the earliest start date for this award is October 1 2020).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Research staff (excluding trainees)** | | | | | |
|  | No. | Salary | Benefits | Funds Requested | |
| Research assistant(s) |  |  |  |  | |
| Technician(s) |  |  |  |  | |
| Other personnel |  |  |  |  | |
| **Research trainees** | | | | | |
|  | No. | Stipend | Benefits | Funds Requested | |
| Postdoctoral fellow(s) |  |  |  |  | |
| Graduate student(s) |  |  |  |  | |
| Summer student(s) |  |  |  |  | |
| **Materials, Supplies, and Service** | | | | | |
|  | | | | | Funds Requested |
| Animals\* | | | | |  |
| Materials and supplies | | | | |  |
| Services | | | | |  |
| Meeting costs | | | | |  |
| Other | | | | |  |
| **Miscellaneous** | | | | | |
|  | | | | | Funds Requested |
| Travel (maximum $6000 per grant) | | | | |  |
| Equipment (maximum $8500 per grant) | | | | |  |
| **TOTAL** | | | | |  |

\* Funding for animal studies is dependent upon an approved animal protocol. If animal studies are contracted out, include this budget allocation under “Services”.

Installment 2:For the period April 1 2021 - March 31 2022 (Note: the earliest start date for this award is October 1 2020).

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| --- | --- | --- | --- | --- | --- |
| **Research staff (excluding trainees)** | | | | | |
|  | No. | Salary | Benefits | Funds Requested | |
| Research assistant(s) |  |  |  |  | |
| Technician(s) |  |  |  |  | |
| Other personnel |  |  |  |  | |
| **Research trainees** | | | | | |
|  | No. | Stipend | Benefits | Funds Requested | |
| Postdoctoral fellow(s) |  |  |  |  | |
| Graduate student(s) |  |  |  |  | |
| Summer student(s) |  |  |  |  | |
| **Materials, Supplies, and Service** | | | | | |
|  | | | | | Funds Requested |
| Animals\* | | | | |  |
| Materials and supplies | | | | |  |
| Services | | | | |  |
| Meeting costs | | | | |  |
| Other | | | | |  |
| **Miscellaneous** | | | | | |
|  | | | | | Funds Requested |
| Travel (maximum $6000 per grant) | | | | |  |
| Equipment (maximum $8500 per grant) | | | | |  |
| **TOTAL** | | | | |  |

\* Funding for animal studies is dependent upon an approved animal protocol. If animal studies are contracted out, include this budget allocation under “Services”.

Installment 3:For the period April 1 2022 – September 30 2022 (or later depending on project start date).

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| --- | --- | --- | --- | --- | --- |
| **Research staff (excluding trainees)** | | | | | |
|  | No. | Salary | Benefits | Funds Requested | |
| Research assistant(s) |  |  |  |  | |
| Technician(s) |  |  |  |  | |
| Other personnel |  |  |  |  | |
| **Research trainees** | | | | | |
|  | No. | Stipend | Benefits | Funds Requested | |
| Postdoctoral fellow(s) |  |  |  |  | |
| Graduate student(s) |  |  |  |  | |
| Summer student(s) |  |  |  |  | |
| **Materials, Supplies, and Service** | | | | | |
|  | | | | | Funds Requested |
| Animals\* | | | | |  |
| Materials and supplies | | | | |  |
| Services | | | | |  |
| Meeting costs | | | | |  |
| Other | | | | |  |
| **Miscellaneous** | | | | | |
|  | | | | | Funds Requested |
| Travel (maximum $6000 per grant) | | | | |  |
| Equipment (maximum $8500 per grant) | | | | |  |
| **TOTAL** | | | | |  |

\* Funding for animal studies is dependent upon an approved animal protocol. If animal studies are contracted out, include this budget allocation under “Services”.

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| **BUDGET DETAILS** |
| **In seven (7) pages maximum,** provide a detailed justification for all budget items requested. In addition, outline how funds will be allocated between the Principal Investigator and Co-Investigator(s). In kind contributions to the project and other sources of funding for the project must be identified. |
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| **REAL OR PERCEIVED BUDGETARY OVERLAP** | |
| **In the space provided below**, supply details of any overlap with existing or proposed funding. Use this space to dispel any uncertainties that could arise in the minds of reviewers as to whether you are already funded, in whole or in part, for the proposed work, as they review the list of funded and submitted grants in your CCV. | |
| Source: |  |
| Amount: |  |
| Comment as to overlap/lack of overlap: |  |
| Source: |  |
| Amount: |  |
| Comment as to overlap/lack of overlap: |  |

*Insert rows as needed.*