



2023

OPERATING GRANTS

Program Description and Guidelines

In the spotlight this year:

- Grant amount has increased to **\$ 125,000 over 2 years.**
- Updated categories for panel expertise
- New targeted funding opportunities: **'Survivorship'**, **'Breast Cancer-Black Women'**, and **'Liver Cancer'** (refer to [targeted funding opportunities](#))
- Applicants are required to include a maximum of **five (5) pages** for the description of the project with **tables and figures embedded**

Effective November 8, 2022 – September 1, 2023

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1. Program Description

Founded in 1945, the Cancer Research Society (CRS) is a Canadian not-for-profit organization whose sole mission is to fund research on all types of cancer to help prevent, detect, and treat this disease.

The Operating Grants competition is the principal means by which CRS fulfills its mission to support fundamental, early translational and environment-cancer research on all types of cancer.

The competition is held every year and is open to researchers across Canada. Both new and established researchers are encouraged to apply. All valid proposals undergo a diligent peer-review process and are scored based on scientific merit and originality.

Operating grants are usually awarded for a period of **two years** for a maximum amount of **\$62,500** per year.

2. Eligibility Requirements

CRS Operating Grants are intended to support Canadian researchers in their pursuit to advance scientific knowledge in the following **five (5) areas**:

- 1) Fundamental/basic cancer research;
- 2) Prevention;
- 3) Early translational cancer research, including preclinical research, cellular or animal models, biomarkers for diagnostics and prognosis, imaging and treatment;
- 4) Research studying the environmental causes of cancer including viruses, pollutants, work environment, lifestyle and diet;
- 5) In collaboration with CIHR, "Survivorship", research to improve the health outcomes of cancer survivors of all ages, from time of diagnosis to their end-of life care, including studies on side effects and comorbidities resulting from cancer therapies.

Please note - The following research areas are not eligible for Operating Grants:

- Clinical trials;
- Applied research for the development or improvement of tools such as instruments, medical devices, software, questionnaires, information tools, patient registries, biobanks, TMA collections, etc.;
- Psychosocial or social studies, etc. (this also applies to survivorship proposals);
- Health care economics, or any study aiming at measuring the use and costs of the health care system;
- Any other type of research not included in the main five funded areas.

Please contact us at grants@src-crs.ca should you have doubts about the eligibility of your project.

There must be only one main applicant, **Principal Investigator (PI)**, and one host institution who will be responsible for administering the grant, if awarded. All other applicants are considered co-applicants.

Applicants and co-applicants must hold an academic appointment at a Canadian university or accredited institution to be eligible to apply for a CRS Operating Grant. Applicants must have their own laboratory and the possibility of hiring students and postdoctoral fellows.

Postdoctoral fellows, research associates, staff and research scientists without an academic appointment are **not** eligible to apply.

Definitions and Rules

Principal Investigator (Main Applicant). *Individual responsible for leading all aspects of the project.*

Co-applicant. *Individual who actively participates on the project but does not hold a leadership role.*

Collaborators. *Individual(s) who contribute to the project in a specialized manner and may be from outside of Canada; however, CRS funds must not be transferred outside of the country. A collaborator will not be listed as a co-applicant, however, must provide a letter of support detailing the involvement in the project.*

An **Early Career Investigator** is an independent investigator, who has started their career in a university or research institution within the last 5 years (i.e. after August 31, 2018). Due to the COVID-19 pandemic, an applicant who has held an Early-career Investigator status as of **March 1, 2020** or attained their first academic appointment after this date will be granted a one-year extension of their status.

A **Mid-Career Investigator** is an independent investigator who has held an academic position in a university or research institution for 5-15 years.

An **Established Investigator** is an independent investigator who has held an academic position in a university or research institution for more than 15 years.

All **Principal Investigators** and co-applicants must sign the “Disclaimer and Indemnity” page, at the time of Full Proposal submission.

3. Application and Review process

The main applicant/PI must register at the CRS Research Portal, ProposalCentral, click [HERE](#)

The application process is comprised of two stages:

- 1) **Letter of Intent** (LOI) submission, and if invited,
- 2) **Full Proposal** submission.

All applicants must submit a LOI that will include a high-level description of their research project goals. **Refer to section 5 for LOI submission instructions.** LOIs are reviewed for conformity and quality by CRS at the time of submission. Once the LOI has been reviewed, the applicant will be notified via e-mail as to whether or not they have been invited to submit a Full Proposal.

Both LOI and Full Proposal must be submitted electronically at the CRS Research Portal, ProposalCentral click [HERE](#).

LOIs must be received by **December 8, 2022, 11:59 pm (ET)**.

Full Proposals must be received by **February 14, 2023, 11:59 PM (ET)**.

Only complete proposals received by the submission deadline will be considered. Proposals that do not respect the guidelines will be rejected.

Full proposals are evaluated by an expert panel made up of renowned Canadian and international scientists, with expertise in specific areas of cancer research. Each proposal is initially reviewed and scored by two expert and impartial reviewers; and subsequently, the proposal is presented, discussed and scored by the entire panel. The average score is then calculated. To be considered for funding, a **project must have received a minimum score of 7.5 out of 10.**

Reviewers use the following criteria to evaluate a proposal:

- The file of the applicant must demonstrate their capacity or potential to be a competitive researcher at the provincial, national, and international level;
- Quality of the proposed project and originality of the research plan;
- Ability of the applicant to conduct the research in their respective milieu;
- Significance of the project to cancer research;
- Strengths and weaknesses of the proposal;
- Budget appropriate to the proposed project.

The Operating Grants are awarded to the proposals with the highest scores. All applicants, regardless of their score, will be notified of the outcome of their application in August 2023. If an applicant declines the award, CRS may offer the grant to the next meritorious proposal on the list.

The Cancer Research Society's decisions are final.

4. Key Dates

Call for proposals	November 8, 2022
Letter of Intent submission deadline	December 8, 2022, 11:59PM (ET)
Invitation to submit Full Proposal	December 14, 2022
Full Proposal submission deadline	February 14, 2023, 11:59PM (ET)
Update publication list deadline	April 13, 2023
Review process completed, awards announced	August 2023
Grant start date	September 2023

The submission deadlines will be strictly enforced. Times are Eastern Time (ET).

Applicants are encouraged to submit their LOI and Full Proposal well in advance of the deadline. The CRS Research Portal, ProposalCentral, automatically shutdowns submission after the deadline has passed.

5. Letter of Intent Instructions

An LOI submission is compulsory for the 2023 CRS Operating Grants Competition and must be completed via the CRS Research Portal, ProposalCentral, by **December 8, 2022, 11:59 pm (ET)**. Click [HERE](#) to access ProposalCentral.

Applicants may submit more than one LOI, but there will be a maximum of 1 new project proposal per main applicant.

Applicants should be mindful that the information provided in the LOI will automatically populate those sections in the Full Proposal. If the LOI is approved, the applicant will be notified by an automated email from ProposalCentral stating that they may proceed to the Full Proposal phase.

The LOI should be submitted by the Principal Investigator managing the project.

LOI: details

Title Page: 81 characters maximum

Type of application: Specify whether the application is new, renewal or resubmission.

- *Renewal:* Applicants who currently hold a CRS Operating Grant that will end **August 31, 2023** may apply for a renewal.
- *Resubmission:* A resubmission is defined as a revised version of a proposal that was unsuccessful in a previous Operating Grant competition. Applicants will be required to upload the previous Evaluation Reports.

Targeted funding opportunities (optional): CRS may offer additional targeted funding opportunities to Early Career Investigators and/or for specific types of cancer. Refer to the [list of targeted funding opportunities](#). If applicable, justify the relevance of your selection(s); at least 80% of the project must be on the cancer type selected.

Abstract: Describe the research aims, anticipated outcomes and their potential impact for patients. Character limit of 5000.

Panel: Applicants must indicate, based on the research area and topic, their first and second choice among the 5 expert review panels. The second choice **must differ** from the first one. CRS will do its best to respect the applicant's first choice, however, reserves the right to assign the proposal to the most suitable panel. Refer to [Appendix A](#) for areas of expertise covered by each panel.

6. Full Proposal Instructions

Only applicants who have submitted a LOI will be invited to complete a full proposal. Applicants can submit only one (1) new project application, as the main applicant. This limit does not apply for renewal applications. A researcher may also participate in other projects as a co-applicant.

Full proposals must be received by **February 14, 2023, 11:59 PM (ET)**.

The degree of conciseness and clarity can significantly influence the evaluation of the application.

All information required for the evaluation of the proposal must be submitted electronically through [ProposalCentral](#). Applicants will be asked to append certain documents by using the designated page in ProposalCentral. Documents sent by email will not be accepted.

Applicants must follow the instructions regarding the number of pages and/or documents to be uploaded and their respective format. Character limit within each section in ProposalCentral is clearly indicated and must also be respected (longer responses will be truncated).

Please note that non-compliance to the guidelines could lead to an administrative rejection of a submitted application prior to its scientific evaluation.

The Full Proposal must be submitted by the Principal Investigator of the managing Institution and must include:

- **Disclaimer and Indemnity Form:** This form must be signed by all applicants, co-applicants and their respective officials. Electronic signatures are accepted. A copy of the duly signed form must be appended in section 14 “Upload Attachments”. French version of the Disclaimer and Indemnity form is also available.
- **Co-Applicants:** All co-applicants must reside in Canada. Co-applicant is defined as an individual who actively participates on the project but does not hold a leadership role. Co-applicant must hold an academic appointment at a Canadian university or accredited institution, have their own laboratory and the possibility of hiring students and postdoctoral fellows.
- **Title Page:** (*Same as LOI*)
 - If applicable, provide the following information:
 - *Renewal:* A brief progress report of the original proposal, including status of key research objectives/aims (2500 characters maximum).
 - *Resubmission:* A resubmission allows the applicant the opportunity to address key critiques raised in the previous Evaluation Reports (2500 characters maximum). Copies of the Evaluation Reports must be uploaded in section 14 “Upload Attachments”.
- **Abstract:** (*Same as LOI*)
- **Lay Summary:** Summary of the research project in lay terms to be understood by those who are not in biomedical research (for press release and communications to donors). Character limit of 500. CRS emphasizes the importance of outreach and the lay summary will be reviewed internally to ensure clarity and suitability to inform the general public. Although optional, applicants are strongly encouraged to provide the French version of the lay summary.

- **Description of Proposed Project:** Describe the proposed research project using a **maximum of 5 pages (8.5” x 11”)**, font *Arial 11 pt. or Times New Roman 12 pt. or similar, single spacing, minimum 2 cm margins*. Supporting figures and tables for preliminary data should be embedded in the 5-page research proposal, a *9-pt.* font may be used for figure texts. The font type and size may vary, but figures, tables and graphs, and their accompanying legends must be readable when printed on **one** 8.5” x 11” page at normal (100%) scale. Non-compliance to the guidelines could lead to an administrative rejection of a submitted application prior to its scientific evaluation. The project description must include the following elements:
 - Brief overview of recent literature with references.
 - Proposed aim(s)/objectives in line with two-year period of the grant and budget.
 - Methodology: Describe the proposed experimental or theoretical approach, the rationale for the approach showing awareness of the complexities involved and referring to the budget as appropriate. State how the data will be collected and analyzed. If the proposed project can be perceived as a repetition or a confirmation of results already published, make sure to describe the additional impact of your results. **If warranted, include any preliminary data in this section.**
 - Research Team: Describe the expertise and contributions of the applicant, co-applicants and key personnel in relation to the proposed project.
 - Collaborators: Describe the expertise and contributions of the collaborators. Attach letters of support in Section 14 Upload Attachments.
 - Impact: Significance of the proposed research and expected outcomes.

Upload the **5-page detailed research proposal with the figures and tables embedded** using the designated button at the bottom of the section. List of references cited in the proposal must be uploaded in section 14, no page limit.

- **Targeted Funding Opportunities:** (*Same as LOI*)
- **Review Panel:** (*Same as LOI*)
- **Budget Period Detail:** Indicate, in Canadian dollars, the financial requirements for 2 years. This grant is limited to \$62,500/year for a maximum of 2 years.

Eligible Expenses:

- Salaries of students and post-doctoral fellows;
- Salaries of research staff (research assistant, research associate, technician);
- Research supplies;
- Publication fees;
- Up to \$2,500 per year for attending meetings, seminars or conferences, registration, travel, accommodation, etc.

Non-Eligible Expenses:

- Remuneration of principal investigators, co-investigators and collaborators
- All indirect expenditures related to layout organization and reorganization; facilities leasing and maintenance, or the indirect costs covered by the host institution;
- Equipment purchase (i.e.: computer, etc.);
- Sabbatical or maternity/parental leave;
- Meetings, seminars or conferences expenses in excess of \$2,500 per year;
- Living expenses;
- Clinical drug trials.

Funds must not be transferred outside Canada.

Stipends for a postdoctoral trainee or a graduate student, paid from a CRS operating grant, must follow the guidelines set by the host institution. The guidelines ensure equity within the research group and academic unit.

- **Current and Pending Support:** The principal investigator must include all sources of research support currently held or applied for, including but not limited to grants (including any from the CRS) and contracts. Any current start-up fund must be indicated.

CRS will not award funds if overlapping and/or comparable support for a project has been obtained (even partially) from another agency, as each application funded by CRS has to be original. An incomplete declaration may lead to cancellation of the grant and a request for the reimbursement of paid installments.

- **Institution Contacts:** Provide information the following contacts:
 - *Financial Officer:* Name and address for distribution of funds.
 - *Grants Officer:* Name and address of the institutional representative authorized to sign the Research Funding Agreement.
- **Organizational Assurances:** Indicate whether or not certificates are required for the proposed research project. For further details please refer to the FAQ on our [website](#).

- **Abridged Résumé and Publications**

This section must be filled out by the main applicant and all co-applicant(s). For each applicant, please create a single document composed of the following sections:

- **EDUCATION:** Include baccalaureate or other initial university education and include post-doctoral training.
- **ACADEMIC, RESEARCH AND INDUSTRIAL EXPERIENCE:** In addition to your current position, list in chronological order, previous employment, experience, and honours.
- **PUBLICATIONS:** List in chronological order COMPLETE references, including titles, for all publications during the past five years, and for earlier publications if pertinent to this application (references only! No description or summary of papers). Applicants are strongly encouraged to include the link to their publications.
- **INTERRUPTION:** Provide explanations for all interruptions of scientific work (maternity leave, illness, moves, etc.).
- **FUNDING:** Provide funding received for the last 5 years.

The last name followed by the first name of the applicant must appear in the top right-hand corner of each applicant's single document.

Append the document(s) in section 14.

- **Upload Attachments:** Every document must be clearly identified. For each document to be uploaded, the following information must appear on each page:

the title of the document in the top left-hand corner, last name and first name in the top right-hand corner (of the applicant or co-applicant, as appropriate) and the page number in the bottom right-hand corner.

- Abridged Résumé and Publications (Applicants and Co-Applicants)
 - Description of the proposed research. Maximum 5 pages with tables and figures embedded
 - List of References (no page limit)
 - Disclaimer and Indemnity Form (Signature Page)
 - Required Certificates (if available)
 - Letter(s) of Collaboration (optional)
 - Reviewer 1 (resubmission only)
 - Reviewer 2 (resubmission only)
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- **PI Demographics:** The information is helpful to CRS when analyzing the demographics of their applicant and it will not be used as part of the review process.

7. Contact information

For questions regarding the **2023 Operating Grants Competition**, contact the Cancer Research Society at grants@src-crs.ca.

For questions regarding **ProposalCentral**, contact Customer Support
Monday through Friday 8:30am - 5:00pm Eastern Time
By e-mail: pcsupport@altum.com

1. **Appendix A: Panels**

All proposals will be evaluated by a peer-review committee (panel) made up of 14 to 17 Canadian and/or international scientists with expertise in the appropriate domains of cancer research.

Applicants must indicate, based on the research area and topic, their first and second choice among the 5 expert review panels. The second choice must differ from the first one. CRS will do its best to respect the applicant's first choice, however, reserves the right to assign the proposal to the most suitable panel.

NEW !!!
Panel A: Cell/Cell Communication and Tumour Adaptation <ul style="list-style-type: none">• Signal transduction• Cell/cell communication (including metabolic coupling)• Tumour Microenvironment• Tumour hypoxia• Tumour Metabolism• Stress Responses (Plasticity)• Post-translational modifications• Cell migration, adhesion and chemotaxis• Pre-clinical models (non-mammalian)
Panel B: Cancer immunology/Pharmacology <ul style="list-style-type: none">• Cancer immunology and immunotherapy• Chemotherapeutic drug development & pharmacological studies• Mechanisms of drug resistance• Cells, genes, viruses or viral genes, vaccines as anti-cancer drugs• Radiation, radiosensitizers, biomarkers• Synthetic Biology and Tissue Engineering
Panel C: Tumour suppressor genes, oncogenes and DNA repair <ul style="list-style-type: none">• Transcriptional and translational regulation• Tumour suppressor genes and oncogenes• Tumour initiation• DNA replication (including cell cycle), damage and repair• DNA integrity and genomic instability• Epigenetic mechanisms• Computational analysis of -omics data• Stem cells (tumor-initiating cells and cancer stem cells)

Panel D: Tumor progression and metastasis

- Cell cultures and animal models
- Identification and validation of novel therapeutic targets
- Tumor angiogenesis
- Metastasis, plasticity and tumor progression models
- Drug and genomic high throughput phenotypic (HTP) screening
- Computational biology, bioinformatics, systems biology, AI

Panel E: Early translational research and epidemiology

- Tumour imaging
- Biomarkers discovery and validation
- Diagnostics and prognostic assays
- Epidemiology