



Guidelines for the Killam NRC Paul Corkum Fellowship

The National Killam Program consists of the Killam Prizes, the Dorothy Killam Fellowships and the Killam NRC Paul Corkum Fellowship. This document is focused specifically on the Killam NRC Paul Corkum Fellowship.

The Killam NRC Paul Corkum Fellowship provides support to a distinguished scholar, granting them time to pursue a novel project in collaboration with an NRC researcher, leveraging NRC facilities.

The Killam NRC Paul Corkum Fellowships encourage collaboration using a co-Principal Investigator (co-PI) model. Submissions to the program must propose one co-PI (the Fellow) employed outside of the NRC, and one co-PI (NRC co-PI) employed by the NRC. Proposed projects must demonstrate alignment with one or more [NRC Challenge Program](#) and may be technical, based on knowledge exchange, or exploratory. Applicants submit their collaborative proposal jointly by email. Documents to be included in the submission package are listed below.

This funding opportunity covers release time and expenses for Killam NRC Paul Corkum Fellows. Grant payments are made to the Fellow's institution.

Expressions of interest may be directed to the National Killam Program Office at KillamProgram-ProgrammeKillam@nrc-cnrc.gc.ca.

Killam NRC Paul Corkum Fellowship application package

Fellowship description

Dorothy Killam had a vision of building Canada's future through advanced study. Through her will, she established a perpetual trust to realize her vision and fund generations of scholars in Canada.

This fellowship is named in honour of Dr. Paul Corkum, professor in the Department of Physics at the University of Ottawa, director of the Max Planck-University of Ottawa Centre and a principal research officer at the National Research Council of Canada (NRC). Dr. Paul Corkum is a world-leading expert in strong field atomic physics. His ground-breaking work in the area of attosecond science is the basis of a strategic partnership between the NRC and the University of Ottawa to lead research and development in this emerging field.



Recipient of the Killam Prize in Natural Science in 2006, Dr. Corkum is a leader in Canadian research, epitomizing the Killam values.

Killam NRC Paul Corkum Fellows are leading researchers whose superior, ground-breaking, best-in-class research stands to have significant impact on a national or global scale. A Killam NRC Paul Corkum Fellow embodies one or more of the Killam attributes:

- Inclusive collaborator
- Barrier breaker
- Research leader

The Killam NRC Paul Corkum Fellowship may support a specific collaborative project, a knowledge exchange initiative, a novel multidisciplinary collaboration, or other scholarly pursuits that advances knowledge.

The program will award up to three (3) fellowships each year, and each fellowship project must align with an NRC challenge program.

Note: If you do not see an area of research that aligns with your proposed project, please contact KillamProgram-ProgrammeKillam@nrc-cnrc.gc.ca to enquire about eligibility.

The Killam NRC Paul Corkum Fellowship is intended to:

- A. enable new and potentially disruptive technologies to be developed with industry, academics and government;
- B. strengthen collaborations with industry, academia, and various levels of government to attain critical mass for addressing national issues of importance to the Canadian economy and quality of life for Canadians;
- C. find solutions to some of the most serious public policy challenges; and
- D. create stronger innovation ecosystems in specific sectors by enabling industry, academics, and government labs to partner with NRC researchers, leveraging NRC facilities and resources, and share knowledge.



Terms and conditions of the program

The Killam NRC Paul Corkum Fellowships support advanced study and research excellence by creating opportunities for Canadian and international scholars to partner with NRC researchers, leverage NRC facilities and resources, and share knowledge through new collaborations. The program promotes discovery and innovation through shared exploration, work and growth. The co-PI model encourages the Fellow and the NRC researcher to collaborate on a project for up to one year.

Killam NRC Paul Corkum Fellowships provide release time from employment for national and international scholars who have demonstrated outstanding research ability and are proposing collaborative research with an NRC researcher.

Fellowships are valued at \$100,000 CAD per year in the form of a grant that is paid to the institution of each Fellow to cover release time. An additional grant of up to \$50,000 CAD is available to accommodate travel and knowledge dissemination costs of the Fellow, based on budget estimates provided in the proposal.

Funding purpose and availability:

Amount	Funded by	Funded to	Purpose
\$100,000 CAD	Grant funding from the NRC’s Collaborative Science, Technology, and Innovation Program (CSTIP)	Institution of Fellow	To cover release time and to support the Fellow and the project
Up to \$50,000 CAD	Grant funding from CSTIP	Institution of Fellow	To cover Fellow’s travel, accommodation, and knowledge dissemination costs (based on provided budget estimates)
Up to \$50,000 CAD	Operational funding from the NRC research centre	NRC co-PI through their Research Centre	To cover NRC co-PI’s travel, accommodation, and knowledge dissemination costs



Project costs	Existing NRC (or partner) research infrastructure is leveraged for the project	Made available to the both the Fellow and the NRC co-PI	Provide access to NRC facilities as identified in the proposal to execute the project
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Funding is issued for each grant in compliance with the [Directive on Transfer Payments](#) and Government of Canada proactive disclosure requirements apply.

The following are examples of eligible activities for this funding opportunity:

- A. Release from teaching and/or administrative duties:
 - to pursue collaborative R&D projects and can include planning, research, development, prototype development, feasibility studies, demonstrations and capacity building intended to support research, development, adoption and/or adaptation of innovative or technology-driven new or improved products, services or processes in Canada up to their commercialization; and/or
- B. Collaboration and knowledge dissemination activities:
 - To pursue projects and initiatives including support for science or innovation-based conferences, workshops, symposia, coordination or other outreach and partnership development activities as well as costs related to the travel to such events by non-government employees.

Killam NRC Paul Corkum Fellows and NRC co-PI are expected to participate in community engagement and knowledge mobilization activities, as well as the interdisciplinary Killam Laureate Network. While activities will vary for each Laureate, one core activity that is consistent for all Laureates is participation in the Killam Laureate Network.

Fellowship winners and NRC co-PI 's may be expected to attend award-related events which can include, but are not limited to, news conferences, award ceremonies and speaking engagements, and to make themselves available for media interviews. They are asked to allow photographs, videos and public information about themselves be used to promote the fellowship, as well as to provide copyright permission for the use of reproductions or clips of their work on collateral and communications materials associated with the Fellowship and on the Killam Trusts', the NRC's and partner websites and social media channels. Killam NRC Paul Corkum Fellows and NRC co-PI's may be recognized at the annual National Killam Celebration of Excellence event.



Individuals that receive funding from the National Killam Program must appropriately acknowledge the support of the NRC and the Killam Trusts, and where applicable, key partners in any promotional materials associated with the funded activities. The Killam logo and the NRC logo, branding representing the Killam visual identity and/or a written message acknowledging Killam and NRC support should be included on event signage, on social media and web content, on news releases and other promotional material. Recognition must be equal to that given to corporate funders or other sponsors or donors for similar support.

Proof of ethics review and approval is required prior to full release of funding for all applicants proposing research involving human participants, and must comply with the conditions set out in the [Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans](#). This requirement applies to interviews and access to documents affecting the privacy of individuals, where living persons or communities may be involved in the proposed research, regardless of the discipline(s) involved, and could include areas such as oral history and biography.

Research involving human participants requiring proof of ethics review and approval also includes:

- when the actions or opinions or responses of human beings are studied in natural or staged environments;
- or when human biological materials (e.g., organs, tissues, cells, body fluids or excreta) obtained from living humans, cadavers, embryos or fetal tissues are studied;
- or when personally identifiable, de-identified information or private documents, data or other materials including images of the body and personal health data, that have not been placed in the public domain with the consent of the person directly affected, are studied;
- or when research involving a secondary use of human biological materials or data from human participants as described above, when individual or combined information is identifiable or de-identified since its collection.

For proposed research involving animals, applicants must also provide proof of ethics approval from an Animal Care Committee certified by the [Canadian Council on Animal Care](#) (CCAC), and must follow the standards established in the CCAC's [Guide to Care and Use of Experimental Animals](#).



Proposed research must follow the Government of Canada's [Policy of Sensitive Technology Research and Affiliations of Concern](#).

A collaborative research agreement will be established at the time of award. The agreement will include intellectual property terms including terms for joint ownership of jointly created arising IP.

Eligibility criteria

A Killam NRC Paul Corkum Fellow is relieved of teaching and administrative duties for the period of the fellowship. The funds are intended to assist the institution with replacement costs of the Fellow while still paying the Fellow's regular salary and benefits during the 12-month fellowship period. Additionally, to maximize collaboration through consistent, in-person contact, the program provides funding to support the Fellow's travel and access to the NRC facilities. All fellowship dispersals are administered to the research institution of the Fellow.

The NRC co-PI is likewise relieved of research and administrative duties for the duration of the fellowship. The NRC co-PI does not receive grant funding. Their costs are paid for using NRC operational budgets.

Equity, diversity and inclusion are fundamental to achieving research excellence. The National Killam Program encourages applications from candidates whose research has consequence and impact, setting precedents and yielding transformative results that serve to build Canada's future through advanced study.

To be eligible, Fellowship applicants must:

- be willing and able to travel to an NRC location or locations in Canada to collaborate with an NRC co-PI as required;
- obtain a reliability status personnel security clearance;
- demonstrate commitment to building Canada's future and alignment with Killam attributes;
- agree to participate in community engagement and knowledge mobilization activities. This may include: participation in the Killam Laureate Network, participation in a Fellows lecture series and invited lectures, and/or participation in

dissemination activities with relevant University departments, or with other organizations or appropriate scientific societies.

- demonstrate commitment to knowledge exchange with their NRC co-PI;
- be a mid-to-late career researcher, although researchers at earlier career stages may be considered in some cases;
- receive release time to conduct the proposed research, and will continue to be employed by the same institution for up to 12 months from the start of the Fellowship; and,
- consent to disclose any information that may constitute a significant departure from generally-recognized standards of public behaviour and which is seen to undermine the public reputation of the National Killam Program.

To be eligible, the NRC co-PI must:

- be employed by the National Research Council of Canada (NRC) at any stage of career;
- hold a reliability status personnel security clearance at the NRC;
- demonstrate commitment to building Canada's future and alignment with Killam attributes;
- demonstrate commitment to collaborate with the Fellow at one or more NRC sites as required for the project;
- receive release time to conduct the proposed research from the NRC, and continue to be employed by the same institution for up to 12 months from the start of the Fellowship;
- demonstrate commitment to knowledge exchange with the Fellow;
- agree to participate in community engagement and knowledge mobilization activities which may require travel; and,
- consent to disclose any information that may constitute a significant departure from generally-recognized standards of public behaviour and which is seen to undermine the public reputation of the National Killam Program.

Note that meeting the eligibility criteria does not guarantee receipt of Fellowship. The National Killam Program Office retains the right to interpret the contents of these application guidelines and of the online instructions and form.

Knowledge mobilization

Knowledge mobilization is defined as the dynamic and iterative process that:



- includes synthesis, dissemination, exchange and ethically sound application of knowledge to improve the lives of Canadians
- takes place between researchers and knowledge users and varies in intensity, complexity and level of engagement depending on the nature of the research and the findings

The National Killam Program, informed by the work of the Tri-councils (Natural Sciences and Engineering Research Council of Canada, Social Sciences and Humanities Research Council of Canada and Canadian Institutes of Health Research), the Royal Society of Canada, and the [San Francisco Declaration on Research Assessment](#) (DORA); recognizes that scholarly contributions are not limited to published journal articles, but can also include other forms of sharing research knowledge. Examples are available in the Joint knowledge mobilization plan section of the Application Procedure below.

Recognizing that knowledge mobilization can be different for each research project, applicants are required to include a knowledge mobilization plan (see below in required documents) outlining their proposed strategy to share and communicate their research beyond traditional modes of scholarly output.

Application procedure

The Fellowship is based on a co-PI model, which requires all submissions to propose one co-PI (the Fellow), employed outside of the NRC, and one co-PI employed by the NRC. There are no restrictions on the nature of the proposed project: projects could be technical, based on knowledge exchange, or exploratory, so long as they align with approved activities per [the terms and conditions of NRC Challenge Program funding](#). Proposals are co-defined by the NRC co-PI and the Fellow.

If you are a Fellowship candidate and need help connecting with an NRC investigator, please complete a [Expression of Interest form](#) and return via email to the [National Killam Program Office](#) (NKPO). The NKPO will consult internally and respond to your inquiry within 10 business days.

Applicants must submit the application form, attestation forms, and all required documents by 23:59 (applicant's local time) on **June 20, 2024 to KillamProgram-ProgrammeKillam@nrc-cnrc.gc.ca**.



The National Killam Program uses a two-stage selection process including external expert peer reviewers and a multi-disciplinary selection committee. **Please ensure that all materials employ plain-language, using clear and simple terms, and are written in a way that a non-specialized audience would understand.**

Applications should contain the following:

1. Application form

Applicants must fill in the application form and return by email with all other required documents. Click [here](#) for the application form.

2. Joint collaborative research abstract (Up to 250 words in English or 300 words in French)

In the official language of your choice, please provide a brief, plain-language summary of the collaborative research being proposed. Using simple terms, describe the nature of the work, why and to whom the research is important, anticipated outcomes, and the manner in which this research stands to have significant impact on a national or global scale and increases the scientific and scholastic attainment of Canadians. This plain-language summary may be made available to peer reviewers, the National Killam Selection Committee, and to the public in the event that you are selected as a program recipient. If you wish, abstracts may be provided in both official languages.

3. Joint project proposal (Up to 1,500 words in English or 2,000 words in French, and up to one additional page for budget estimates, and up to five additional pages for references)

Include information on the proposed collaborative research, methodologies, proposed impact of the partnership, and the candidates' experience with related methodologies/projects.

Project proposals should include:

- information on the proposed research, what is planned to be achieved, a detailed description of the approach (a detailed methodology), hypothesis,

and how it advances knowledge in the field. Up to five (5) additional pages may be included for references

- information on the candidates' experiences with the proposed methodologies
- information on the extent to which this project builds upon existing projects **or** information on how funding will enable the exploration of a new area of research or a new project
- information on how relief time will be used
- a high-level budget based on cost categories which may include but is not limited to: travel and accommodation, and knowledge dissemination related costs. Please note that up to \$50,000 is available for these expenses. A sample budget table is provided below.

Category	Brief description	Estimated cost (in CAD)
Travel		
Accommodation		
Knowledge Dissemination		

- Please note that a high-level budget is sufficient at the time of submission. If successful, Fellows will be asked to submit a more detailed budget that is in accordance with Government of Canada travel and meal allowance rates.

4. **Joint knowledge mobilization plan** (Up to 1,000 words in English or 1,200 words in French)

Knowledge mobilization plans should include:

- a clear description of the dissemination of research results, information on the proposed impact and possible indicators to measure research outcomes of the proposed collaboration
- information on the potential strategic impact of the proposed project and potential for benefits to Canada.
- information on both candidates' experiences working with the proposed strategies and plans, including where possible, non-traditional ways to disseminate knowledge and information.
- information on how the co-PI and fellow will personally engage in knowledge mobilization activities over the course of the fellowship.

Some examples of indicators that demonstrate outstanding commitment, creativity and efforts to share research knowledge may include:

- teaching, mentoring, supervising and/or coaching
- participating in science and/or research promotion
- conducting community outreach, volunteer work and/or civic engagement activities
- chairing committees and/or organizing conferences and meetings
- participating in departmental or institutional organizations, associations, societies and/or clubs participation in professional, academic and extracurricular activities, as well as collaborations with supervisors, colleagues, peers, students and members of the community
- videos, blogs, podcasts, performances
- policies influenced or informed and/or patents or IP secured
- articles, datasets made available, software, and/or protocols developed
- commitment to producing well-trained researchers, improved societal outcomes and/or policy changes
- community engagement initiatives, media production, or educational mentorship programs
- demonstrated engagement with research communities and/or to work with diverse lab teams
- demonstrated commitment to training or participation in research initiatives with underrepresented communities

5. **Joint community research supplement** (optional, up to 500 words in English or 750 words in French)

Community-based research involves active participation of stakeholders whose lives are affected by the research in all phases of project for the purpose of producing useful results to make positive changes¹.

¹ [Approach | CBRCanada \(communityresearchcanada.ca\)](https://www.cbrcanada.com/communityresearchcanada.ca)

A community-based research supplement is recommended in instances where community research is being carried out but may not be applicable to all research projects. Proposals that include community research are encouraged to provide the following supplemental information:

- description of existing relationships with a community or communities
- information on any permissions conferred to carry out the research that involves a community or communities either directly or indirectly
- description of the role of community members in shaping the research question(s) as well as the role community members play in contributing to, sharing, or applying research findings
- description of how the proposed research contributes to, or is expected to contribute to, positive outcomes, benefits to the community, or change in policy or practice following research completion

6. **Two letters of support** (Each up to 1,000 words in English or 1,200 words in French)

Letters of support from the institution of each co-applicant are required including:

- one letter of support from the NRC expressing support for the project and detailing why the candidates are well positioned for the project, the benefit of the proposed collaboration, including potential benefits to Canada, how the proposed project will advance research, why this project is important now, how the project aligns with NRC challenge program(s) with confirmation of support from respective challenge program director(s), and what facilities/resources will be made available to the co-PIs and
- one letter of support from the Fellow's institution expressing support for the project and detailing why the candidates are well positioned for the project, the benefit of the proposed collaboration, and how the institution will provide release-time for the Fellow.

Letter writers must clearly specify the nature of their relationship with the applicant.

To reduce the potential for unconscious bias in the evaluation process, letter writers are asked to please: refer to applicants consistently by their surname(s), use gender-neutral pronouns, and remove institutional letterhead.

7. **Two Curriculum Vitae (CVs) with Candidate Statements** (Up to 30 pages in English or 36 pages in French)

Two full CVs including candidate statements, one from the Fellow nominee and one from the NRC co-PI. Each document should contain the following parts:

Part 1: A candidate statement (Up to 1,000 words in English or 1,200 words in French), including information on the candidate's interest and background relevant to the proposed project. In this section, indicate how the researcher, their work and/or the collaboration demonstrates or reflects 1 or more of the following Killam attributes:

- Inclusive collaborator - whose work exemplifies inclusion and understanding of people, cultures and needs with participation among all economic, social and cultural backgrounds
- Barrier breaker - whose original, transformational, future-focused generation of knowledge and technology stands to change the way we live
- Research leader - who activates thoughtful cooperation among scholars, disciplines and institutions to create a multiplier effect within the research ecosystem

The candidate statement should underscore how the candidate's demonstration of the Killam attributes advances Dorothy Killam's vision of building Canada's future through advance study.

The candidate statement should include information regarding what other assets (teams, infrastructure, etc.) each candidate will leverage as part of the proposed project.

Part 2: Information on publications, presentations, grants and other fellowships received, awards and/or general recognition, especially those that focus on the process and impact of the proposed collaborative research.

8. **Attestations** – Attestation forms from each co-applicant, as well as their respective institutions.

Proof of eligibility via attestations must be provided to demonstrate that the co-applicants (proposed Fellow and NRC co-PI) meet the eligibility requirement of institutional employment for up to 12 months from the start of the fellowship.

- Applicants must each attest that they meet the eligibility requirement of institutional support for up to 12 months from the start of the fellowship.
- Applicants must attest that they will disclose any information that may constitute a significant departure from generally-recognized standards of public behavior and which is seen to undermine the public reputation of the National Killam Program.
- The institution of the Fellow nominee must attest that the proposed Fellow meets eligibility requirements and will receive release time to conduct the proposed research, and will continue to be employed for up to 12 months from the start of the Fellowship.
- The NRC must attest that the NRC co Principal Investigator meets eligibility requirements and will receive release time to conduct the proposed research, and will continue to be employed for up to 12 months from the start of the Fellowship. They must also attest that the Research Centre will make up to \$50,000 available to the NRC co-PI, and that the project has the support of the relevant challenge program director(s).
- All 4 required attestation forms can be accessed [here](#).

9. **Voluntary Self-Identification Form**

In alignment with the Tri-Councils, the National Killam Program asks applicants to voluntarily provide self-identification data. The collection of self-identification data is a central piece of the National Killam Program’s Equity, Diversity, and Inclusion (EDI) Action Plan. This data provides information on the diversity of the population applying for and receiving funding. This information increases the National Killam Program’s capacity to monitor progress on increasing EDI in their programs, to recognize and remove barriers, and to design new measures to achieve greater EDI. Please find the voluntary self-identification form [here](#).



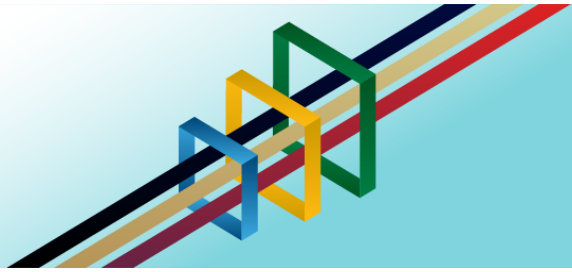
Evaluation criteria

Following external review, the National Killam Selection Committee evaluates applications on their merit, compared with each other and in a national context, and may use publicly available sources of information. The fellowships will be offered to candidates considered outstanding by the Committee. Where assessment results are not meaningfully different, the Committee will consider cohort factors that will contribute to a diverse and representative group.

Anonymous and discretionary feedback from the National Killam Program Office to applicants may be shared once the annual winners have been announced.

The following points will figure prominently in the review and selection of the candidates considered for the Killam NRC Paul Corkum Fellowships:

Criteria	Description	Weight
Merit	<p>Exceptional quality of each candidate's research record taking into account career stage, the norms of the field of study, and the nature of the research environment.</p> <p>Clear evidence of how the proposed candidates and/or collaboration <i>builds Canada's future through advanced study</i> in alignment with one or more of the Killam attributes:</p> <ul style="list-style-type: none"> <u>Inclusive collaborator</u> - whose work exemplifies inclusion and understanding of people, cultures and needs with participation among all economic, social and cultural backgrounds. 	25 %



	<ul style="list-style-type: none"> • <u>Barrier breaker</u> - whose original, transformational, future-focused generation of knowledge and technology stands to change the way we live. • <u>Research leader</u> - who activates thoughtful cooperation among scholars, disciplines and institutions to create a multiplier effect within the research ecosystem. 	
Advancement of knowledge	<p>Evidence of each candidate's outstanding commitment, creativity and efforts to share research knowledge beyond the academic community.</p> <p>Details on the proposed collaborative research, how it advances knowledge in the field, how knowledge will be effectively disseminated, if there are potential interdisciplinary benefits as well as the urgency of this research at this moment in time.</p>	25 %
Methods	<p>Sound research methods including a clear description of the approaches, hypothesis and statement of problem and a commitment to ethical research conduct including honest and thoughtful inquiry, rigorous analysis, commitment to safety and research ethics, to the dissemination of research results, and adherence to professional standards.</p>	25%
Impact	<p>Demonstrates how the proposed collaborative research is transformative while addressing Canada's priorities.</p>	25%



	<p>Potential contribution of collaborative research results to Canadian society, including the nation’s intellectual and/or cultural life; as well as international impact where appropriate.</p> <p>Relevance of the research, immediate as well as long term outcomes, and clear and compelling evidence of how the research stands to have a positive impact on Canada, creating conditions that trigger breakthroughs across the innovation continuum.</p>	
Total		100%

Privacy

The National Killam Program Office and the Selection Committee will not release any information in the application that is specified as confidential, including names or any self-identifying information.

Anonymous demographic information may be aggregated and used by the National Killam Program Office to measure and report on performance.

The [Privacy Act](#) gives individuals the right to access and request correction of personal information about themselves.