Ontario Molecular Pathology Research Network (OMPRN) – Cancer Pathology Translational Research Grant (CPTRG)

Request for Applications 2025

Application due date	September 9, 2025
Announcement of decision	October, 2025
CPTRG	1-year project, • Stream 1 - $75,000 • Stream 4 - $100,000
Funding period	March 1, 2026 – February 28, 2027
Competition budget	$400,000

Background

The Ontario Institute for Cancer Research (OICR) is a collaborative research institute that conducts and enables high-impact translational cancer research. OICR helps to accelerate the development of discoveries for patients around the world while maximizing the economic benefit of this research for the people of Ontario.

The **Ontario Molecular Pathology Research Network (OMPRN)** is a collaborative research network funded by OICR with a focus on enhancing molecular pathology research and practice across the province by:

1. Fostering collaboration and cooperation between Ontario pathologists;
2. Increasing the participation of pathologists in high-quality translational cancer research;
3. Providing opportunities for residents, fellows and early career pathologists to obtain training and mentorship in cancer research; and
4. Increasing public awareness, especially among patients and their family members, of the role of molecular pathology in precision medicine and contemporary cancer care.

OMPRN's vision is to foster learning and collaboration through the creation of a province-wide network of pathologists who have a common goal in the practical application of molecular pathology in research and clinical practice. OMPRN has developed objectives under the three broad themes of (i) Pathology-led Research, (ii) Awareness & Outreach and (iii) Education.

The Cancer Pathology Translational Research Grants (CPTRG) address the third imperative by supporting projects in which the primary drivers are pathologists and the primary focus is on pathology cancer research.

CPTRG awards will build the capacity of Ontario pathologists to undertake transdisciplinary research projects that advance the field of cancer diagnostic, prognostic or predictive testing and provide learning opportunities for pathology residents or early-career pathologists.

This year, two granting streams, **Stream 1** and **Stream 4**, are available to support projects that promote research excellence and transdisciplinary collaboration and encourage membership in a pathology research community.

Stream	*Description*	*Amount*	*Duration*	*Anticipated number of funded grants*
Stream 1	Supports one-year, collaborative research projects that bring together a pathologist Principal Investigator (PI) with a trans-disciplinary Co-Investigator and a pathology trainee.	$75,000	1 year (ending February 28, 2027)	4
Stream 4	Supports one-year, collaborative research projects based on the applicants' previous OMPRN-funded research. The proposal must focus on translating research findings from the previous research towards clinical use. Projects will bring together a pathologist Principal Investigator (PI) with a trans-disciplinary Co-Investigator, a pathology trainee and a patient partner.	$100,000	1 year (ending February 28, 2027)	1

Research team composition

Applicants in either stream must be part of a multidisciplinary team consisting of:

1. Principal investigator (PI) in either stream: a practicing, Ontario-based pathologist with an academic faculty appointment. For the purpose of this competition, a pathologist is defined as: EITHER a MD with certification from the Royal College of Physicians and Surgeons of Canada (RCPSC), or an equivalent governing body in another jurisdiction, in Diagnostic and Molecular Pathology, Diagnostic and Clinical Pathology, Hematopathology or Neuropathology with hospital responsibilities; OR, an MD or PhD clinical laboratory scientist with Canadian College of Medical Geneticists (CCMG) fellowship or equivalent with hospital responsibilities. Note that for Stream 4 the PI does not necessarily need to be the same PI on the previously funded OMPRN CPTRG proposal. Stream 4 PIs must, however, have been named PIs, Co-investigators or trainees on the previously funded OMPRN grant(s).

2. Co-investigator in either stream: An Ontario-based MD or PhD with an academic faculty appointment who crosses a substantial trans-disciplinary boundary relative to the PI. Examples include oncologists or other clinical investigators, bioinformatics experts and basic scientists. Teams consisting of a practicing MD pathologist with hospital responsibilities and a clinical laboratory scientist with CCMG

fellowship or equivalent with hospital responsibilities are eligible for this competition, whereas teams consisting of two MD pathologists or two CCMG clinical laboratory scientists are not.

3. Trainee in either stream: a pathology resident with an MD degree enrolled in an Ontario-based residency-training program or an Ontario-based CCMG trainee. Postgraduate pathology trainees who have completed or are eligible to undertake the RCPSC certification examinations but who have not yet assumed a faculty or staff position will be eligible to occupy the role of trainee for up to 24 months after completion of their PGY5 year. Faculty members cannot be considered trainees.

This mentorship requirement will be considered addressed and the requirement to include a Trainee, as defined above, will be waived if the named PI is a junior faculty member within seven years of his/her first academic appointment *and* the co-investigator is an established senior investigator. In this case, applicants must provide (1) a letter from the senior investigator confirming their mentorship role, and (2) a letter from the Department Head confirming institutional support and allotted research time.

4. Patient partners (Stream 4 only): At least one patient partner who will be engaged throughout the project term must be named and their role in the study should be clearly described. Applicants are encouraged to engage patient partners early in the research planning process. For help identifying a suitable partner, consult:

- OICR's Patient Partnership Resource Page
- Your institution's patient engagement or research administration offices
- Clinical collaborators or networks who regularly work with patient advisors
- The OMPRN Patient Partnership Lead, Leigh-Ann van Strijp (leigh-ann.v@queensu.ca)

At least one member of the applicant team must be an RCPSC-certified MD pathologist or MD pathology resident. With a view to involving as many researchers as possible in the Network, individuals may apply in only one stream and for no more than one grant per competition as either a Principal Investigator or Trainee.

OMPRN and OICR are focused on developing and supporting the next generation of cancer researchers and strongly encourages applications from teams that include Principal Investigators, Co-investigators and/or Trainees from historically under-represented communities.

Applications that breach these restrictions will not be reviewed.

Project scope for Stream 1

Projects must be likely to advance the field of cancer diagnostic, prognostic or predictive testing. Collaborations between Ontario institutions, including use of OICR's Collaborative Research Resources (CRR) and other trans-institutional use of core resources, are

encouraged, as is leveraging of existing collaborative clinical trials networks. It is expected that most proposals will make use of primary human cancer samples.

Examples of the types of projects OMPRN seeks to fund include:

- Novel approaches to making definitive pathological cancer diagnoses under challenging circumstances such as small tissue samples or difficult-to-recognize cancer types;
- Incorporation of molecular and/or computer-assisted image analysis data in the pathological classification of tumours;
- Identification or validation of prognostic or predictive cancer biomarkers, including in the context of drug discovery or clinical trials.

Project scope for Stream 4

In addition to the scope described for Stream 1, Stream 4 proposals must also be based on the applicants' own previously funded OMPRN research and are intended to encourage and support the translation of research findings to clinical use. For example, performing validation studies on an independent cohort and proposals to refine the methodology for measuring a biomarker are within scope for Stream 4. Applicants will be required to show evidence of substantial progress from the original OMPRN-funded research project. Documents that would satisfy this requirement include a manuscript draft that is ready for submission to a journal, an accepted peer-reviewed publication, a patent application, clinical practice guidelines that are under consideration or have been adopted, etc. Please append a maximum of 2 of these supporting documents to your Stream 4 application form.

Evaluation criteria for both Streams

1. **Relevance:** Potential to contribute tangibly to the field of pathological tumour diagnosis, pathological classification, or prognostic/predictive testing.
2. **Research Excellence:** Scientific merit and originality of the proposed approach.
3. **Impact:** Potential for clinical utility with respect to the diagnosis, prevention, or treatment of cancer.
4. **Collaboration:** Potential to result in substantive interdisciplinary collaboration between Ontario cancer researchers.
5. **Capability of the Team:** Applicants demonstrate the requisite scientific and/or clinical expertise and capacity to carry out the proposed research.
6. **Feasibility:** Availability of institutional resources for the project, including facilities, sufficient time and an appropriately justified budget to support the work.
7. **Mentorship:** Proposal contains clearly defined learning/mentorship objectives relating to pathology cancer research and a substantive role for the pathology trainee (or early career investigator) in completing the project.
8. **Data Integration:** Preference will be given to proposals that address the integration of data generated in the course of the project (for example, image data) with orthogonal data (for example, genomic or transcriptomic data) from the same tissue samples. The study of samples linked to clinical trials so as to permit linkage to clinical data should also be considered. OICR provides assistance with data integration, analysis and publication through the Canadian Data Integration Centre (CDIC).
9. **Patient-Centred Impact:** The *Plain language summary*, the *Value to patients and the public* and the *Patient partnership plan* (Stream 4 only) sections will be evaluated by patient partners, and their scores will be included in the overall score for the proposal.

Declaration of Research Assessment
OICR is a signatory to the San Francisco Declaration of Research Assessment (DORA). As such, OICR and OMPRN are aligned with DORA principles through our commitment to assessing the quality and impact of scientific research through means other than journal impact factors (e.g. assessing the value of all research outputs, including qualitative indicators of impact, such as changes to policies, practices and curricula). As part of our commitment to these principles, applicants are asked NOT to include journal impact factors or other journal-based metrics in any document submitted as part of the application process.

Use of Artificial Intelligence
OMPRN and OICR aligns with the Canadian federal research funding agencies ("the agencies") recent *Guidance on the use of Artificial Intelligence in the development and review of research grant proposals*. As with the agencies, OICR expects that applicants will draft proposals and supporting text themselves; use of AI to draft application materials may be considered plagiarism as per the Tri-Agency Framework: Responsible Conduct of Research. As part of the application process, applicants will be required to clearly state if and where application material has been generated by AI.

Research Security and Geopolitical Risk Attestation
As part of the full application, the lead applicant (PI) must attest that they understand that each named investigator listed on the application will be required to complete an attestation regarding research security and geopolitical risk should the application be selected for funding. This attestation will include declaring all collaborations (including the receipt of in-kind support) with entities listed on the federal government's Named Research Organizations list. As part of the attestation process, investigators who declare a collaboration(s) with entities on the Named Research Organizations list agree to provide clarifying details of the nature of the collaboration and agree to provide a risk mitigation plan (to be reviewed and approved by OICR).

Review process
Applicants are invited to submit a grant application along with supporting documents and CVs for each team member by **September 9, 2025**. Applicants must submit either the S1 or S4 Forms provided; instructions for completing these forms can be found in **Appendix I** below.

Complete application forms should be submitted via email with supporting documents (see checklist) to kn20@queensu.ca.

Applications will be reviewed and scored by scientific and patient partner reviewers according to the criteria defined above and then ranked. Reviewers will consider the project's innovation, feasibility, potential impact and alignment with OMPRN and OICR objectives. Cutpoints for funding will be approved by the OMPRN Steering Committee. Award recipients will be notified in October 2025.

Use of funds
Budget guidelines and allowable costs can be found in **Appendix II**.

Contracting and agreements
OICR will enter into funding agreements with the Lead Institution of successful applicants. The Lead Institution is the institution of the PI. Lead Institutions will be responsible for the flow of funds to partner institutions for work done in relation to CPTRG projects. Only funds for eligible expense categories (e.g. External Services) can be sent to partner institutions outside of Ontario.

Reporting requirements
All funded projects will be included in OICR's annual key performance indicator (KPI) reporting process, as required by the Ministry of Colleges, Universities, Research Excellence and Security. Financial officers of the PI's host institution will be required to provide updates on budget versus actual expenditures. Detailed KPI, progress and financial reporting requirements will be sent to successful applicants.

Communication requirements
Grantees will be required to acknowledge OICR in all scientific publications or presentations by setting out in any communications materials or publications referencing the research the following statement: ***"This study was conducted with the support of the Ontario Institute for Cancer Research through funding provided by the Government of Ontario. The views expressed in the publication are the views of the authors and do not necessarily reflect those of the Government of Ontario."*** Additional obligations of the investigators to advise OICR, OMPRN and OICR Communications of anticipated public dissemination, publications and media announcements will be outlined in the funding agreement. OICR and OMPRN strongly support unrestricted access to research outputs and align with the Tri-Agency Open Access policy on Publications and the Tri-Agency Research Data Management (RDM) Policy. Funding agreements for successful applicants will include the expectation for adherence to Open Access and RDM principles. Applicants must provide a data management plan, specifying what data will be generated by the OICR-funded research and how data will be collected, documented, shared and retained in a publicly accessible repository. Where applicable, the plan should contain appropriate power analysis to ensure that the study is designed to support or refute the hypothesis. Any software code developed by grantees through their proposal should be made available on open access source repositories (e.g. GitHub). Any datasets generated by grantees should be made publicly available through the appropriate public or controlled tier data repository.

Application checklist

- ☐ Application form (S1 Form for Stream 1 and S4 Form for Stream 4)
- ☐ For Stream 4 applicants: Supporting documents that demonstrate progress associated with previously funded CPTRG award (max 2)
- ☐ List of works cited in your preferred formatting style and appended to application form
- ☐ Preliminary data and/or figures (optional; single additional page only)
- ☐ Budget spreadsheet
- ☐ Deliverables and milestones spreadsheet
- ☐ Applicant CVs
- ☐ Letter from Trainee's Program Director specifying time allotment for research (when Trainee involved in project)
- ☐ Letter from Senior Investigator (where PI is an early-career faculty member)
- ☐ Letter from Department Head (where PI is an early-career faculty member)

Contact information
For questions on the funding guidelines, overhead calculations, eligibility and how to apply please contact:

Kyster Nanan, Project Manager and Education Lead, OMPRN
Email: kn20@queensu.ca
Phone: 613-533-2748

Appendix I: Application Form Guidelines

- Stream 1 applicants use the S1 form and Stream 4 applicants use the S4 Form

Applicant information
Please attach a CV for the PI, one Co-investigator and one Trainee with your application. At a minimum, CVs should include a history of training and academic credentials, employment history, research funding and publications for the past five years. Funding information should include: i) source of funding; ii) funding period (month and year); iii) total dollar amount of funding; and, iv) for current funding, the degree of overlap with the proposed project.

For applications in which the named PI is a junior faculty member within seven years of his/her first academic appointment and the co-applicant is a senior investigator, include (1) a letter from the senior investigator confirming their mentorship role, and (2) a letter from the Department Head confirming institutional support and allotted research time. This requirement is revisited in the *Learning/mentorship objectives* section below.

Transdisciplinary nature of collaboration
Explain the relationship between the PI and Co-investigator and why this should be considered transdisciplinary in the context of the proposed work. This collaboration should cross a substantive inter-disciplinary boundary. In what respect are their contributions complementary?

Scientific abstract
Provide a scientific abstract that covers key background information and summarizes the project's aims, methods and anticipated impact.

Plain language summary
Explain the goals and anticipated clinical impacts of the project in terms that are clear, concise and accessible to patients, caregivers and the public. The plain language summary should be understandable to a general audience at the high-school level. Applicants are encouraged to work with a patient partner, or similar, to draft the plain language summary.

Value to patients and public
Explain how the proposed research meaningfully reflects patient needs and priorities by identifying the unmet needs it addresses and explaining how these were determined. Describe the expected benefits for patients (e.g. potential improvements in diagnosis, treatment, outcomes or quality of life). Highlight how patient perspectives have shaped the research and its potential to make a meaningful impact.

Patient partnership plan (Stream 4 only)
Applicants should describe how patient partners and/or communities will be meaningfully engaged throughout the lifecycle of the proposed project. This includes outlining when and how patient partners will be involved, what their roles will be and how their contributions will inform research planning, execution and knowledge sharing.

This section must be written as a stand-alone summary in clear, plain language, assuming the reader may not have access to the full proposal. It should be understandable to a

general audience, including those with a high school education. Applicants should name the patient partner(s), describe how they were identified, and outline specific deliverables or milestones they will contribute to.

OMPRN encourages applicants to consult the training modules on patient engagement in research developed by the CIHR Institute of Musculoskeletal Health and Arthritis.

Project description
For re-submissions of applications that were declined funding in a previous year, a response to the reviewers' comments may be provided.

Preliminary data and/or figures may be included in a single additional page as an attachment; additional supplementary material will not be considered. References to published literature should be included. These additions will not count against the word limits.

Learning/mentorship objectives
The project should allocate a significant portion of work to the Trainee (or early-career PI), and this work, by its nature, should entail substantive intellectual engagement.

For applications in either Stream that include a Trainee, describe the learning and mentorship objectives for the Trainee and explain how the project will meet these objectives. Outline the specific steps that will be taken to provide mentorship and explain how sufficient time will be made available for the Trainee to complete the project. A letter from the trainee's Program Director must be appended, specifying the amount of dedicated time the Trainee will be given to carry out the project.

For applications in either Stream in which the PI is an early-career faculty member (i.e., the application is from two people rather than three), a letter must be appended from the Co-investigator attesting to their relative seniority and explaining how the mentorship requirement will be addressed.

Early-career faculty members must also provide a letter from their Department Head confirming institutional support and allotted research time.

Research environment
Please include information about the institutional resources, time and research environment available to conduct this project and why this will be conducive to completing the project successfully.

Use of Artificial Intelligence
As part of the application process, applicants must clearly indicate if and where generative artificial intelligence (AI) tools were used in the development of their application (e.g., drafting text, literature searches). This aligns with guidance from Canada's Tri-Agency and OICR's commitment to research integrity. Use of AI without disclosure may be considered a breach of responsible conduct in research.

Research Security and Geopolitical Risk Attestation
All applications must acknowledge that, if the proposal is selected for funding, each named investigator will be required to complete a research security and geopolitical risk attestation. This includes declaring any collaborations or in-kind support involving entities listed on the Government of Canada's Named Research Organizations list. Investigators with declared collaborations will be asked to submit a risk mitigation plan for OICR review.

Institutional sign-off
To be completed by the Vice-Principal of Research or Signing Authority of the Principal Investigator's host institution.

Appendix II: Budget and Deliverables and Milestones Guidelines

Budget

This section provides guidance for completing the budget Excel spreadsheet as part of the CPTRG application for Stream 1 and Stream 4.

Allowable costs

This section outlines the various cost categories that are allowed for inclusion in the CPTRG Stream 1 and Stream 4 budgets. All amounts are in Canadian dollars, unless otherwise stated.

Table 1 Allowable costs and costs eligible for overhead

Project costs	Administrative costs
Salaries and benefits*	Dissemination of research results
Laboratory consumables (external)*	Travel costs
Internal charge-back services and consumables	
External research services	
Software purchases and subscriptions†	

* Overhead eligible
† Software subscriptions shall not exceed 1 year

Project costs

1. **Salaries and benefits:** Allowable costs include salaries and benefits for:
   - Specialists such as statisticians or informaticians (where applicable and if they are employees of the Lead Institution i.e., the institution of the PI) or a Partner Institution (the institution where the Co-Investigator is based);
   - Technicians and other qualified personnel working directly on the research project.

   Salaries and benefits for any applicants are not allowable costs.

   Provision of salary increases should reflect applicable institutional guidelines. *Salaries and benefits are eligible for overhead*.

2. **Laboratory consumables (external)**: Costs for laboratory consumables purchased from external suppliers and directly related to the research project are allowable. *These costs are eligible for overhead.*

3. **Internal charge-back services and consumables:** This cost category includes internal charge-back amounts for laboratory services and consumables (within an institution). Examples include services and consumables billed through your institution's core histology, imaging and bioinformatics facilities. All internal charge-back costs must be included in this category, even if they would otherwise be classified as consumables.

   Internal charge-back amounts are not subject to provincial sales tax or GST/HST. Applicants are advised to review quotes/invoices for internal charge-back amounts accordingly to ensure that taxes are not included in the quotes/invoices.

   Internal charge-back services and consumables are not eligible for overhead.

4. **External research services**: This cost category covers costs related to research services provided by external research groups/institutions other than the Lead or Partner Institution, OICR Technology Programs (if applicable) or OICR-funded companies. The external group must issue an itemized purchase order/invoice that includes the full cost of the services rendered (e.g., labour, consumables, sample handling, etc.). The services must be free from any intellectual property (IP) restrictions or restrictions on use of the data.

   Note that many public sector institutions pay an effective tax rate for provincial sales tax or GST/HST which is lower than the rate that other organizations must pay. When obtaining a quotes, applicants are advised to confirm the effective tax rate.

   External research services are not eligible for overhead.

Administrative costs

1. **Dissemination of research results:** Include costs associated with the dissemination of research results and/or specific, well-justified knowledge translation strategies including publication costs directly related to the project, up to a maximum of $4,000 per year. *Dissemination of research results costs are not eligible for overhead.*

2. **Travel costs**: Include travel costs (up to a maximum of five per cent of the total project budget before overhead) for applicants. All travel must be undertaken in accordance with the Lead or Partner Institution's travel policies. *Travel costs are not eligible for overhead.*

   Note that travel costs are capped, as described above, and that unused allocations from other cost categories cannot be used for travel costs.

Overhead costs
A maximum rate of 30 per cent overhead will be applied to eligible costs and will be approved as part of the budget approval process. The sum of allowable costs and overhead must not exceed $75,000 for Stream 1 and $100,000 for Stream 4.

At the time of yearly financial reporting, reported overhead will be based on actual expenditure and not budgeted amounts. Any resulting difference between the budgeted and actual amounts will require adjustments in consultation with the affected institution.

Non-allowable costs
This section outlines the various cost categories that are NOT allowable for inclusion in the project budget. These include:

- Salaries and benefits of named applicants;
- Catering;
- Reimbursement of travel and accommodations for participants;
- Purchase of equipment or infrastructure;
- Rent, maintenance, and leasehold/facility infrastructure improvements;
- Bonuses;
- Funding for any project where there is significant scientific overlap (e.g., the research objective and design are identical or very closely related) with a project currently funded though other sources; and

- Any project costs that are funded, will be funded, or reimbursed by any third party, ministry, agency, or organization of the Government of Ontario.

Budget monitoring
PIs are expected to:

- Monitor allocation of the project budget closely and regularly, and take corrective action whenever necessary;
- Provide annual financial reports to OICR; and
- Seek approval for any deviations from proposed project activities or budget that are greater than 15 per cent of the total budget.

Please note: OICR does not have the ability to allow carryover of funds into the subsequent fiscal year; therefore, all unspent funds at the end of the funding period must be returned to OICR. If research is delayed due to unforeseen events, a 1-year no-cost extension (NCE) may be granted. Requests for NCEs should be submitted to the OMPRN Director for consideration. Approval is not guaranteed.

Funding from tobacco industry
Any project whose personnel or host institution are receiving concurrent support from the tobacco industry (including companies or corporate divisions that directly manufacture or purchase tobacco for production, or market tobacco products, including the Council for Tobacco Research or the Smokeless Tobacco Council) are ineligible for OICR funding. The Project PIs/trainee/early career investigators are responsible for ensuring compliance with this requirement.

Deliverables and Milestones
This section provides guidance for completing the Deliverables and Milestones Excel spreadsheet as part of the CPTRG application for Stream 1 and Stream 4.

Deliverables
A deliverable is a measurable and tangible outcome of the project. These should be developed in alignment with the scientific goals of the project.

Milestones
Milestones are checkpoints throughout the life of the project. They identify when one or multiple groups of activities have been completed thus implying that a notable point has been reached in the project.

Please refer to the "Example" worksheet in the Excel file for additional instructions and a sample completed table. Ensure that your milestones and deliverables align with your proposed timeline and budget. The project must be designed to be completed within one year (March 1, 2026 – February 28, 2027). A minimum of three milestones spaced across the project period is recommended, with at least one at mid-point and one at project completion.

If you have questions while preparing your table, please contact OMPRN (kn20@queensu.ca).