

Cancer Pathology Research Fellowship Program - Request for Applications

Application due date	December 9, 2019
Decision announcement	January, 2020
Fellowship award	\$80,000 for one year, with potential for \$80,000 for consumables
Funding start date	July 1, 2020

1. Introduction

The Ontario Molecular Pathology Research Network (OMPRN) is a province-wide network of pathologists collaborating to carry out high-quality cancer research with a clear potential for clinical impact. Its mission of enhancing Ontario's molecular pathology research capacity is conducted through three activity streams: i) fostering collaboration and cooperation between Ontario's academic pathologists; ii) increasing their participation in high-quality translational cancer research; and, iii) providing training opportunities for the next generation of cancer pathologist, ensuring they are equipped with the technical knowledge, skillset and capability for the application of rigorous molecular and diagnostics methods for cancer research. OMPRN is funded by the [Ontario Institute for Cancer Research](#) (OICR) and is part of OICR's Adaptive Oncology initiative. Adaptive Oncology aims to build a deeper understanding of cancer evolution in space and time while developing adaptive approaches to cancer management that anticipate and thereby counter tumour evolution. OMPRN has developed the Cancer Pathology Research (CPR) Fellowship Program to provide additional training for future cancer pathology researchers and help launch their independent careers.

IMPORTANT: Prospective applicants and their supervisors are strongly encouraged to make use of OICR's [Collaborative Research Resources](#), including the [Princess Margaret Cancer Centre-OICR Translational Genomics Laboratory](#) (TGL), [Diagnostic Development](#) and [Genomics and Informatics](#) to process biospecimens, generate genomic or other data, and obtain expert assistance with data analysis and project design. Experts affiliated with these resources are available to work with applicants to develop technical and budgetary aspects of research projects. **Applicants are encouraged to initiate contact with OICR staff well before the application deadline for assistance in designing the project. Letters of support from the leadership of these programs will be considered favourably.**

2. Objectives

The overarching goal of the CPR Fellowship program is to support the training of cancer pathology subspecialists with documented experience and skill in molecular cancer research and diagnostics and with potential to pursue a successful career in cancer research. The Fellowship is also intended to encourage and support the use of OICR's [Collaborative Research](#)

[Resources](#), including the [TGL](#), [Diagnostic Development](#) and [Genomics and Informatics](#), by the broader Ontario cancer research community.

3. Definitions

Host Institution:

The Host Institution is the institution that will administer the Fellowship award funds. Eligible Host Institutions include any Ontario university or research hospital. OICR will establish a formal agreement with the Host Institution detailing the terms and conditions governing the Fellowship Award.

Supervisor:

CPR Fellows will receive supervision from a faculty member affiliated with an Ontario university who is an established cancer research scientist or pathologist.

4. Eligibility

- A. MD pathologists who are eligible to write their Royal College of Physicians and Surgeons of Canada (RCPSC, or equivalent bodies in other jurisdictions) fellowship examinations, or who have passed their RCPSC (or equivalent) examinations no more than two years prior to the application deadline. Trainees should provide a letter from their program director attesting to their suitability to sit the 2020 examination.
- B. Ph.D. laboratory geneticists who are in a Molecular Genetics or Cytogenetics laboratory training program of the Canadian College of Medical Geneticists (CCMG, or equivalent bodies in other jurisdictions) and eligible to write the 2020 CCMG (or equivalent) exams, or who have passed their laboratory CCMG (or equivalent) examinations no more than two years prior to the application deadline. Trainees should provide a letter from their program director attesting to their suitability to sit the 2020 examination.

5. Amount and duration of award

OMPRN will provide up to two one-year Fellowships valued at \$40,000 each. For each Fellowship, the Host Institution will provide \$40,000 in matching funds such that \$80,000 will be available to cover the CPR Fellow's salary and benefits. Where justified, additional funds of up to \$80,000 per award (inclusive of applicable overhead: see Appendix 1, pg. 7) will be made available to cover consumables, services or other operating costs incurred while conducting the research.

Award recipients are expected to attend the OICR Pathology Club and OMPRN's annual Pathology Matters meeting in order to share experience, foster collaboration amongst cancer pathology researchers and explore/develop opportunities for working across multiple projects where appropriate. At least 80% of the CPR Fellow's time must be spent on research during the tenure of the award.

6. Application information

Submission of a Cancer Pathology Research Fellowship application consists of Form I (Administrative information and research project) Form II (Budget and justification), and Appendices (references, figures, Curricula Vitae (CVs), and Letters of Support).

Submissions are due by **December 9, 2019** to kn20@queensu.ca. Files must be labelled as follows, where XXX is Candidate's First Name and YYY is Candidate's Last Name. Appendices should be scanned as one PDF document.

- CPR XXX YYY Form I (Word format **AND** signed PDF format);
- CPR XXX YYY Form II (Excel format);
- CPR XXX YYY Appendices (bookmarked PDF format).

The following material must be submitted in the application:

- **Form I: Administrative information and research project, which includes:**
 - Candidate information;
 - Supervisor information;
 - Host Institution Administrative Authority information. To be completed and signed by the candidate's Host Institution contact;
 - Candidate biosketch and career plans (maximum 600 words). The candidate should cite their prior research experience and accomplishments and outline their future career plans in relation to cancer research. Candidates who demonstrate a serious commitment to cancer research will be prioritized for funding.
 - Research project description (maximum 1600 words). The project must be likely to have an impact on cancer diagnostic, prognostic or predictive testing. It is expected that projects will make use of primary human cancer samples and be aligned with the objectives of OICR's Adaptive Oncology program. 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 data or artificial intelligence 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;
 - Build new and deeper understanding of cancer evolution in space and time; and,
 - Develop adaptive approaches to cancer management that anticipate and counter tumour evolution.

NOTE: Form I must be completed using 10-point Verdana font and single spacing. Margins cannot be modified in the forms provided. All word limits must be strictly followed.

- **Form II: Budget and justification:** For applications requesting funds to cover operating costs (up to a maximum of \$80,000 **inclusive of overhead**), a justified budget must be included.

- **Appendices:**
 - 1. References (one page);
 - 2. Figures (one page);
 - 3. Candidate CV: This can be in any format that is convenient but must outline education/ training, honours and awards, professional affiliations, and research outputs (e.g. publications, presentations, etc.). For Canadian Common CVs, use the CIHR – “preview” academic funding template;
 - 4. Supervisor CV: This can be in any format that is convenient. For Canadian Common CVs, use the CIHR – “preview” academic funding template. For any other version, please ensure that the CV covers education/training, employment, honours and awards, professional affiliations, research funding in the past five years, student/fellow training, and research outputs (e.g., publications, IP, presentations);
 - 5. Supervisor Letter: A letter from the proposed Supervisor outlining the specific role of the Candidate in the project, the supervisory and mentoring activities to be provided, and describing the research environment available to the Candidate. Note that the track record of the proposed Supervisor in research, teaching and mentorship, and the research environment that s/he can provide will be considered during the review process;
 - 6. Host Institution Letter: A letter from a representative of the Host Institution (e.g., pathology department Chair/Chief or university representative) attesting that the host institution will provide \$40,000 in matching funds;
 - 7. Training Program Director Letter: For applicants who have not yet written their qualifying examination, a letter from the Pathology Residency Training Program Director or CCMG Credentials Committee confirming that the applicant will be eligible to write the Royal College Fellowship or CCMG examination in the Spring of 2020; and
 - 8. Letters of Support: Where applicable, letters from collaborators affiliated with the [Princess Margaret Cancer Centre-OICR Translational Genomics Laboratory](#) (TGL), [Diagnostic Development](#) and [Genomics and Informatics](#) or other OICR programs.

7. Review process

Application packages will be evaluated by a panel composed of non-conflicted members of the OMPRN Steering Committee supplemented by external experts, as required for fair and expert evaluation.

8. Use of Funds

Budget guidelines and allowable costs can be found in Form II.

9. Fellowship Award Agreements

OICR will establish a formal agreement with the Host Institution detailing the terms and conditions governing the Fellowship Award.

10. Reporting Requirements

A final report, developed by the CPR Fellow with input from the Supervisor, must be submitted to OMPRN (kn20@queensu.ca) at the end of the award term.

CPR Fellows MUST present their work at the annual OMPRN Pathology Matters meeting and attend quarterly Pathology Club meetings. Travel costs will be covered by OMPRN and should not be included in the application budget.

11. 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.***” Grantees must also agree to provide the OMPRN Leader with at least 30 days’ notice of any planned communication. As a publicly funded organization, OICR has a fundamental interest in ensuring the findings resulting from the research it funds are available to the widest possible audience, and at the earliest possible opportunity. Therefore, grantees are also required to deposit all final peer-reviewed full-text manuscripts in the OICR Institutional Repository (OICR-IR) at the time their publication is accepted. This publication can be freely accessible through the publisher’s website or through the OICR-IR. All publications must be freely accessible within six months of publication.

12. Application checklist

- Form 1
- Form 2
- Appendices
 - References;
 - Figures;
 - Candidate CV;



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- Supervisor CV;
- Supervisor Letter;
- Host Institution Letter;
- Training Program Director Letter;
- Optional appendices may include letters of collaboration, including from representatives of OICR's [Collaborative Research Resources](#), such as the [Princess Margaret Cancer Centre-OICR Translational Genomics Laboratory \(TGL\)](#), [Diagnostic Development](#) and [Genomics and Informatics](#).

13. Contact Information

For questions, please contact:

Kyster Nanan, PhD, Project Manager, Ontario Molecular Pathology Research Network/Ontario Institute of Cancer Research

Email: kn20@queensu.ca

Phone: 613-533-2748

Appendix I: Budget Guidelines

Budget

This section provides guidance for complete the budget Excel spreadsheet as part of the CPR Fellowship application.

Allowable costs

This section outlines the various cost categories that are allowed for inclusion in the CPR Fellowship budgets. All amounts are in Canadian dollars, unless otherwise stated.

1. **Laboratory consumables:** Costs for laboratory consumables directly related to the research project are allowable. *Laboratory consumables are eligible for overhead.*

This category must be used for costs related to internal charge-back laboratory services within an institution (where applicable). *Internal charge-back amounts are not eligible for overhead.*

2. **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. The services must be free from any intellectual property (IP) restrictions or restrictions on use of the data. *External research services are not eligible for overhead.*

Overhead costs

A maximum rate of 30 per cent overhead may be applied to eligible costs (as per above). If a Fellowship is awarded, at the time of 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.