



NSERC CREATE in Engineering Health Equity Graduate Fellowship Application Instructions

Engineering Health Equity (EHE) Graduate Fellowships are valued at \$15,000 and are awarded for one year. Fellowships can be renewed for additional years. Renewal of funding is contingent upon satisfactory participation by the trainee in all required activities (EHE communities of practice and annual retreat during each year of their participation and one field research placement of at least 8 weeks duration in a low-resource setting during their graduate studies) and demonstration of satisfactory progress in a research project that is within the scope of the EHE program. Trainees who are eligible to renew their funding will be sent a separate application form at the beginning of the third academic term of their fellowship.

To be eligible for an EHE Graduate Fellowship, applicants must be currently enrolled in, or have received an offer of admission to, a research (*i.e.*, thesis-based) master's or doctoral program at Western University and must be within their period of funding eligibility (two years for a master's program, four years for a doctoral student with a prior master's degree, five years for a direct-entry doctoral student or a student who has reclassified from a master's into a doctoral program).

Applications for Fellowships beginning in the Fall 2024 term are due September 30, 2024 at 4:30 pm.

Applications for Fellowships beginning in the **Winter 2025** term are due **November 15, 2024 at 4:30 pm**.

Applications must be submitted as e-mail attachments in either Word or PDF format to the Frugal Biomedical Innovations program at <u>frugalbiomed@uwo.ca</u>.

A complete application consists of:

□ The **Application for Graduate Fellowship form** with all fields completed.

 \Box The **Supervisor Acknowledgement form** with all fields completed, including the check box near the bottom of the form and the supervisor's signature.

Specific Instructions

The Fellowship Application and Supervisor Acknowledgement forms contain locked fields. Applicants are only able to type in the fields that are highlighted in gray in the blank forms. The Fellowship Application form will not accept responses that exceed the character limits indicated on the form.

Refer to the review rubric at the end of these instructions for topics that are important to address in your application. This rubric will be used by the EHE Graduate Fellowship review committee.

Supervisor: EHE trainees must be supervised or co-supervised by a Western faculty member who is an Applicant, Co-Applicant, or Collaborator on the Engineering Health Equity CREATE proposal. Prospective applicants who are uncertain of their supervisor(s) eligibility should consult the EHE Program Coordinator before submitting an application.

First term of graduate studies: Format your response as one of Fall, Winter, or Summer followed by the year, e.g., Summer 2024. This information is needed to establish the duration of your funding-eligible period.

Research discipline: Click on the appropriate check box to indicate your selection according to the following considerations.

The EHE budget has a specific number of Fellowships allocated to trainees performing research in a natural sciences or engineering discipline that would ordinarily be funded by NSERC and a separate allocation of Fellowships for trainees performing health, social science, or humanities research that would ordinarily be funded by CIHR or SSHRC. One component of the evaluation of your research proposal will be the review committee's assessment of whether the research methods and objectives proposed are consistent with the discipline selected. Applicants' attention is directed to the following web pages for further information:

- <u>Selecting the Appropriate Federal Granting Agency</u>
- NSERC Addendum to the Guidelines for the Eligibility of Applications Related to Health
- CIHR <u>What Is Health Research?</u>
- SSHRC <u>Subject Matter Eligibility</u>

Project title: Provide a lay-language title that will be effective for public communication of the EHE program's research activities.

Research Proposal: Applicants are strongly encouraged to organize their proposal using appropriate section headings such as "Background and Motivation", "Objectives", "Methods", and "Expected Outcomes and Impact". Proposals should identify the frugal biomedical innovation that will be developed or evaluated, include at least a tentative objective for the applicant's field research placement, and address the other review criteria included in the evaluation rubric at the end of these instructions. Applicants are referred to the article "<u>What is frugal innovation? Three defining criteria</u>" for the model of "frugal innovation" that informs the expectations for an EHE research project.

Low-resource setting for the project: EHE projects must address an application of frugal biomedical innovation to needs in a specific low-resource setting and will include research questions or technology design objectives that are relevant to the challenges and constraints encountered in low-resource settings. Applicants are referred to the article "<u>Unravelling 'low-resource settings</u>': A systematic scoping review with qualitative content analysis" for a general discussion of the characteristics of low-resource settings, but the strongest applications will focus on challenges in the region where the applicant intends to undertake their field research placement.

State of development of the innovation: The EHE program is accountable to NSERC to ensure that all funded graduate trainees complete a field research placement sometime during their

graduate program. We anticipate that EHE trainees will undertake a diverse range of field research activities, so projects could potentially begin at any stage of technology development. The review committee will consider the current state of readiness of your project's frugal biomedical innovation when assessing the likelihood that your proposed field research activity will be feasible within your funding-eligible period.

Appendix: EHE Graduate Fellowship Review Criteria

We do not anticipate that all funded applications will receive a rating of "Strong" in all three categories, but applications that are assessed as "Insufficient" in any category are unlikely to be funded.

Insufficient	Project objectives are not clearly defined or are not consistent with the objectives of the Engineering Health Equity program.
Acceptable	Project objectives are stated and are consistent with the objectives of the Engineering Health Equity program.
	Research methods and objectives are consistent with the selected broad research discipline (<i>i.e.</i> , natural sciences or engineering research vs. health, social science, or humanities research).
	A tentative field research activity is included in the project plan.
Strong	All of the criteria for a rating of "Acceptable" are satisfied <i>and</i> at least two of the following criteria are evident:
	Impressive consideration of both technical and non-technical aspects of the project.
	The field research plan is well integrated and essential to the overall project.
	High confidence that the project will lead to a new technology suitable for deployment in a low-resource setting <i>or</i> to innovative application of an existing technology in a low-resource setting.

Research Proposal

Analysis of Intended Low-Resource Setting

Insufficient	No low-resource setting is identified <i>or</i> its stated characteristics demonstrate insufficient research into that setting or a lack of understanding of low-resource settings in general.
	No or superficial linkage of the low-resource setting's characteristics to the project's design or research objectives.

Acceptable	A low-resource setting is identified, but only in broad terms (e.g., generic low-resource challenges are cited, variability of resources within a nation or region are not acknowledged).
	Some linkage of design or research objectives to the setting's characteristics is evident, but important aspects of the project rationale are incompletely addressed.
Strong	Discussion is specific to the named low-resource setting and supported by references or applicant's lived experience.
	Convincing justification that project objectives will address a recognized need in that setting.
	Demonstrates an understanding that available resources will vary within a nation or region.
	Note: A named partner is desirable, but not necessary, to receive a rating of "Strong" for this criterion.

Technology Readiness Level

Insufficient	Readiness level is not stated clearly <i>or</i> justifications provided are not consistent with the reported readiness level. Proposed field research activity is unlikely to be completed in a timely
	fashion given the current readiness of the technology.
Acceptable	Readiness level is assessed convincingly, but limits the project to deliverables that will be of modest impact.
Strong	Readiness level is assessed convincingly and provides confidence that the project will deliver high-impact outcomes.