

## MSc Epidemiology Thesis Research Proposal

### OVERVIEW

As outlined in the MSc Epidemiology thesis research guidelines ([https://www.mcgill.ca/epi-biostat-occh/files/epi-biostat-occh/discipline-specific\\_thesis\\_guidelines-24-apr-2020-final\\_003.pdf](https://www.mcgill.ca/epi-biostat-occh/files/epi-biostat-occh/discipline-specific_thesis_guidelines-24-apr-2020-final_003.pdf)), it is expected that the thesis will describe a methodologically rigorous research study which incorporates the epidemiological and biostatistical knowledge base mastered over the course of training in the program. This will generally include one (or more) specific hypotheses or research questions which will be investigated using either primary or secondary data, and a detailed analysis. Results will be interpreted thoroughly and prompt a discussion of the scientific contribution made in the context of past evidence and future implications of the research. While no specific research design is prohibited, students are advised to review their research protocol with their supervisor and thesis supervisory committee early in the program to ensure that the proposed research meets MSc program expectations. As part of this process, it is **required** that all students enrolled in the MSc Epidemiology program submit to the department (gradcoord1.eboh@mcgill.ca) a research proposal by **June 30** of the first year of the MSc program. This document must be dated and signed by the student AND all members of the thesis supervisory committee (i.e. primary supervisor, co-supervisor (if applicable) and any other member(s)).

### RESEARCH PROPOSAL GUIDELINES

The thesis proposal should include the following sections and be formatted as follows: Maximum 2 pages (with references separately on a page 3), single-spaced, Arial font size 10 or Times New Roman font size 12.

**Thesis title:** The title should be explicit and informative.

**Background:** This section should provide a brief overview of the literature and highlight the rationale for the proposed study (Maximum ½ page).

**Research objectives:** A clear and concise one-sentence overall objective of the proposed research is expected. Secondary objectives may also be specified. It may be helpful to follow the PICO (Population, Intervention (or exposure), Comparison, and Outcomes) framework, or equivalent, depending on the research objective(s) .

**Methodology:** This section should specifically state the proposed study design and provide details on the proposed methodology, including study population, measurement and variables and the plan of analysis.

**Feasibility:** It is critical that the study be feasible and completed within a reasonable timeframe, usually one year. As a reminder, for thesis research which includes field work (i.e., the student collects her/his own data for the thesis research), a rule of thumb is that data collection should be completed within six months, in order for there to be sufficient time to carry out the analyses and to write the thesis within the next six months. Similarly, for MSc thesis research relying on

secondary data, these data should be available or expected to be received within a reasonable timeframe, ideally by the end of the first year of the MSc degree program. (Keep in mind that data preparation and management may necessitate extra time and /or resources.) The appropriate ethics approvals must have been obtained. For secondary data analyses, an explicit statement is expected about the availability of the data.

**Expected results/Impact of the proposed research/Knowledge contribution:** This section should highlight how the proposed research will fill gaps in knowledge. Indicate here if, and how, the proposed research will be published as one or more manuscripts. (Maximum: ¼ page).

**References:** An exhaustive list is not required. Consider including only key references. These can be listed separately, as a page 3.

## **EVALUATION OF THE THESIS PROPOSAL**

Two members of the Epidemiology Program Committee, selected by the MSc Program Director and Advisor (and confirmed not to have a Conflict of Interest), will evaluate the proposal according to the criteria used by the Canadian Institutes of Health Research for peer review of project applications (<https://cihr-irsc.gc.ca/e/49560.htm>): See this website for details for each criterion.

Criterion 1. Concept

Criterion 2. Assessment of Feasibility (Criterion 2.1 primarily).

A brief written evaluation will be transmitted to the student, usually before the end of September.

There will be three possible outcomes of this evaluation:

1. Acceptable – the thesis research can proceed as proposed.
2. Conditional acceptance – the thesis research can proceed after responding satisfactorily to comments made in the evaluation. A time limit will be imposed.
3. Not acceptable – the thesis research cannot proceed as proposed and requires re-submission of a new research proposal. Again, a time limit will be imposed.

**Note:** Changes often occur during the conduct of research and this should generally be managed by the student's supervisor. However, major changes to the research objectives should be reported promptly to the MSc program director who will decide whether another research proposal is required.