

## **Comprehensive Exam**

### **Written proposal**

The written proposal for the comprehensive exam must be submitted to each of the examiners plus the Chair 2 weeks before the date of the exam. The examiners will have two weeks to look over the proposal and to determine if it is suitable for examination. This means that the proposal meets the minimum standards for acceptance and contains all of the necessary elements:

- Overall statement of research problem and significance,
- Relevant background information,
- Hypothesis/rationale,
- Description of experimental approaches including controls and feasibility,
- Discussion of possible outcomes and how they will be interpreted,
- Discussion of the significance of the work

If the examiners find the proposal unacceptable, the examiner will indicate the reason by email. The student will revise the proposal accordingly and re-submit the proposal to all examiners within two weeks.

The research proposal will still be examined at the comprehensive exam. Successful defense of the research proposal, in addition to general knowledge of the relevant field, will be required for the student to pass the comprehensive exam

### **Guidelines for the Written Portion of the Comprehensive Exam**

The written portion of the comprehensive proposal should be a coherent description of the student's project, written in the format of a CIHR grant proposal.

The proposal should contain a 1 page abstract (double-spaced) and the text is strictly limited to a maximum of 20 pages of double-spaced text not counting references or figures.

The research proposal should contain:

- a) An introduction/literature review with sufficient background information.
- b) A hypothesis and a list of specific objectives.
- c) A description of the experimental plan for each specific aim that includes:
  - (i) Rationale
  - (ii) A description of the experimental approach
  - (iii) A discussion of feasibility, potential problems and how those problems could be addressed
  - (iv) A description of any results to date
  - (v) A description of potential outcomes of proposed experiments as well as a description of how the results will be interpreted
  - (vi) A description of the significance of the proposed research
- d) A bibliography containing recent references.
- e) Essential figures (summary figures, pathways, key pieces of data) with brief figure legends.

•The research proposal must be written in paragraph form and not in point form except for lists of hypotheses or specific aims.

Examples of good written proposals from past comprehensive exams will be kept on file and made available to students (note that these will not be put on the departmental web site due to privacy issues).

MICB 506 assignments will give students practice in preparing a written proposal.