



Neuroscience Graduate Program Comprehensive Evaluation

Date: _____

Student Name: _____

Student #: _____

Attendees (Chair, Committee, Observer): _____

Component	Comments	Evaluation	Initials
Written Proposal			
Oral Presentation			
Questions			
Overall	Pass with Distinction (Pass +), Pass or Fail		

Signatures (Committee members)	Signatures (Supervisor & Student)
_____	_____
_____	_____
_____	_____

PhD Comprehensive Requirement

The Ph.D. comprehensive requirement must be attempted within 20 months of entering the Ph.D. program and passed within 24 months. It is designed to examine the student's ability to:

- define a major question in Neuroscience research
- evaluate the research literature critically
- design experiments to address the research question

The student, in consultation with their supervisory committee, selects an area of concentration. Note that although this area may be relevant to the student's thesis work, the comprehensive topic must differ enough from the thesis project – both conceptually and methodologically – to stretch the student in (a) new direction(s).

The student then writes a grant-style research application similar to a Canadian Institutes of Health Research (CIHR) operating/project grant application.

Students are encouraged to meet with their comprehensive exam committee to discuss the scope of the grant proposal and to review the reading list. The student will submit the written grant proposal and will be examined orally on the proposal, as well as on their knowledge in the area of concentration.

Comprehensive committee members are encouraged to mentor the student during the examination process by suggesting readings the student should be familiar with, by discussing the student's ideas, and by providing feedback about the grant proposal.

- The committee must include:
 - the student's thesis supervisor (non-voting member & Chair),
 - one member from the Supervisory committee,
 - and two additional members from the Neuroscience faculty.

When a student is co-supervised only one supervisor will participate in an official capacity on the comprehensive committee as the Chair. The Program Director and/or a designate may attend the exam as an observer.

The Chair's role is to adjudicate the oral, support the student in developing the topic for the comp, ensure that the student has prepared for the oral exam.

The written proposal, oral presentation, and answers to questions will be evaluated within the framework of the 3 objectives of the comprehensives (ability to define a major research question; evaluate the literature; design experiments to address the research question).

The student's performance on each component and the overall comprehensive will be judged as:

- Pass with Distinction,
- Pass,
- or Fail.
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Students who fail the overall evaluation will have a second opportunity to take the comprehensive exam.

Important: *The following sections provide an outline for the evaluation and a benchmark for a Pass evaluated as a strong pass. Please read these sections carefully.*

Evaluating the Comprehensive Proposal, Presentation, and Answers to Questions

The information below will help the committee members to evaluate the 3 parts of the comprehensive exam and provide an overall evaluation. This information is modeled on the guidelines provided to reviewers for CIHR Postdoctoral Fellowship applications.

The committee members will evaluate each part of the comprehensive (proposal, presentation, answers to questions) and provide an overall evaluation using the guidelines outlined below. These evaluations will be used as the starting point for the discussion among committee members. The Chair will guide this discussion and help the committee to arrive at a consensus evaluation for the comprehensive.

The different levels of Pass and Fail are internal to the program and are to help the committee provide clear feedback to the student. The final evaluation sent to Grad Studies is either Pass, Pass with Distinction, or Fail.

The Chair will ensure that one evaluation form is filled out, signed by all committee members and the student, and submitted to the Director of the Neuroscience program. The Chair will also meet with the student to go over the feedback from the comprehensive evaluation.

Working Definition

A carefully planned, systematic comprehensive proposal aimed at clearly answering a question in Neuroscience research. An organized and clear presentation aimed at effectively communicating an appropriate level of information.

What to Look For

The ideal comprehensive is one that is best for the candidate given their education, experience and interests. It is the right balance of challenge, importance of the research question, and demonstration of the candidate's knowledge of the area.

Remember that it is not the project *per se* that is being assessed. It is the project as an integral part of the candidate's development as a graduate student researcher, expansion of their knowledge of the field, and demonstration of their ability to effectively communicate ideas and knowledge.

Evaluation	Benchmark
Pass with Distinction	Extraordinary optimization of: challenge to the candidate, scientific importance and knowledge of the area. An ideal project that is faultlessly outlined and the candidate demonstrated exceptional knowledge.
Pass	Excellent optimization of: challenge, scientific importance and knowledge. A highly suitable project that was superbly outlined and the candidate demonstrated excellent knowledge.
Pass	Strong optimization of: challenge, scientific importance, and knowledge. A very suitable project that was clearly outlined and the candidate demonstrated good knowledge with few gaps.
Pass	Good optimization of: challenge, scientific importance and knowledge. A suitable project that was well outlined and the candidate demonstrated adequate knowledge with few gaps.
Fail	Mediocre. A suitable project that was poorly outlined and the candidate demonstrated many gaps in their knowledge.
Fail	Not acceptable A poor project that was poorly outlined and the candidate demonstrated poor knowledge.

A Benchmark Comprehensive Proposal

The information below is a summary for a benchmark proposal. It provides the committee members and the candidate with descriptive information about what is expected for a comprehensive evaluation of a Pass - Strong.

Information on a hypothetical candidate is presented as though it has been extracted for you from a CIHR application form by another reviewer.

The benchmark proposal presents information on a hypothetical candidate adapted from an application to the Fall 2005 CIHR Postdoctoral Fellowship competition.

You will note from the previous page that there are description for 4 levels of performance suitable to be assigned a Pass. This summary below fits the Pass - Strong description. Committee members are encouraged to discuss the descriptors on a case by case basis to arrive at an appropriate overall evaluation. Remember these are guide lines designed to help calibrate the committee members and student about the expectations for the comprehensives in the Neuroscience program.

Summary of a Benchmark Comprehensive Research Proposal

- The candidate's research project (written and oral) was presented with the appropriate level of information and knowledge. When technical terms were introduced they were, with a few exceptions, adequately explained. The principal research hypothesis was reasonably well articulated.
- The project appeared to be a good fit with the candidate's background. It extends the candidate's background - but clearly builds on their knowledge and skill set while still exploring a new area and research strategies. It appeared to be a good complement to the candidate's research work for the PhD.
- The proposed research question is likely to impact on future research in the area. There is also a high likelihood that results will be relevant to clinical practice. [note: clinical relevance is not a requirement for the Neuroscience comprehensives.]
- The project would probably be considered moderately innovative by others working in the area. The work is doable and, with few exceptions, the experimental design is appropriate.
- There seems to be a good fit between the candidate's project and their career goals. The proposal, presentation and answers to questions showed elements of independent thinking.
- The candidate's knowledge of the area seems well balanced. The candidate's ability to answer questions was, with a few exceptions, good and showed that they have an adequate understanding of the strengths and limitations of their research proposal.