

DOCTORAL THESIS PROPOSAL

PURPOSE:

The purpose of the thesis proposal is to examine the student's understanding of their research area, and for the student to demonstrate their competence in formulating, and communicating a proposal for the research that is planned for the thesis. The thesis proposal will typically be examined in place of the student's second fall BMG review for students who start in September, and will typically be examined within 15 months of starting the program for students who start in January, May, or July.

A 5-page written proposal (12-point font, 1" margins, single-spaced) plus relevant appendices is required. The proposal should contain (in the following order): Introduction/Background, Preliminary Data & Rationale, Hypothesis, Research Aims, Significance, Figures & Tables, and Supplementary Information. The appendices should include relevant figures and/or tables. There must be enough detail so that the committee can provide the student, and the advisor with an assessment of the approach, feasibility, and significance of the thesis proposal. The proposal should be distributed to the committee Members at least **7 days prior** to the meeting. It will be discussed during the meeting, with the student expected to answer questions related to the written document.

If the committee unanimously agrees that the thesis proposal is acceptable as written, they will indicate their approval (with or without reservations) by signing the [PhD Thesis Proposal](#) form. If the committee members do not approve the proposal, they will provide the student with written feedback regarding improvements. The student will revise the proposal, and arrange a second meeting with the committee to discuss and defend the document, to be held within two months of the first meeting. If the proposal does not receive unanimous approval at this second meeting, the student will be required to withdraw from the program

DOCTORAL THESIS

EXAMINING COMMITTEE:

Doctoral students are advised to contact the [FGS](#) for the most up-to-date information.

DISTRIBUTION OF THESIS PAPER:

Doctoral students are advised to contact the [FGS](#) for the most up-to-date information.

ORAL EXAMINATION:

Doctoral students are advised to contact the [FGS](#) for the most up-to-date information.

COPIES OF THE FINAL PhD THESIS:

A final electronic copy of the thesis is required to be submitted to the [FGS](#) and the BMG Department. Bound copies are not required.

PhD CANDIDACY EXAMINATION

PURPOSE:

The purpose of the PhD Candidacy Examination is to uniformly, rigorously, fairly, and expeditiously assess the student's: (a) breadth of knowledge of biochemistry, genetics, and/or computational biology; (b) abilities to research, identify, critically analyze, creatively synthesize, and communicate ideas about that knowledge in depth both orally and in writing; and (c) suitability to undertake training for an advanced scientific credential.

SCHEDULING:

Students must take their PhD Candidacy Examination within 12 months of completing their coursework.

COMPOSITION OF THE CANDIDACY EXAMINATION COMMITTEE:

All Candidacy Examination Committee members must be members, or adjunct members of the FGS. The Candidacy Examination Committee will consist of the Chair of the GSAC (or an alternate selected by the Department Head in the event the Chair is also the student's advisor), an additional member, and two "constants" from the Department of BMG who will serve on all examination committees for that session. The supervisor will be given the opportunity to provide names of individuals to include as examiners (2) and to exclude as examiners (2) to avoid potential conflicts or bias. The student's supervisor/co-supervisors cannot be a member of the Candidacy Examination Committee.

CONTENT AND FORMAT:

The written component consists of a 5-page (excluding executive summary, references, figures, and tables), single-spaced editorial review using 12-point font and 1" margins.

Students will have three weeks after receiving the review topic area to write the editorial paper. They must critically, and creatively evaluate the topic area identified by the Candidacy Examination Committee by conducting all necessary background research on the academic progression of the subject to date including methodology and underlying rationale, ethical issues, scientific integrity, competing theoretical explanations, current status of the area, and directions for future research. Students are encouraged to receive peer-review from fellow students; but not from faculty.

EVALUATION AND EXAMINATION:

Faculty will normally have one week to review the editorial paper, and provide a decision of "pass" or "fail" to the Chair of the GSAC, or designate. If the student passes, then the oral examination normally occurs the next day. The oral examination normally consists of a maximum of two hours of questions. One or fewer dissenting votes constitutes a "pass", while two or more dissenting votes constitute a "fail". The source of the questions will be based on the written document, drawn from a standard "question bank" developed by BMG faculty (made available to the student), and on the discussion arising during the course of the examination.

If the editorial review is failed, the committee will provide oral and written feedback to the student the next day. The student will have an additional two weeks to revise the original document.

In the evaluation of the revised document, the committee will normally be allowed one week to decide "pass" or "fail". One or fewer dissenting votes constitutes a "pass", while two or more dissenting votes constitute a "fail". If the student passes, the oral examination will normally occur the next day. If the student fails the oral examination on the first attempt, the student will be allowed one additional attempt but on a different topic, and with a newly struck Examining Committee. Failure on the second attempt will require the student to withdraw from the program.