

## Department of Biochemistry and Molecular Genetics

### Preliminary Qualifying Exam

1. Students in their second year who have successfully completed all didactic course requirements are required to pass a preliminary qualifying examination in order to advance to Ph.D. candidacy. This examination must be completed by the end of June in the summer following the second year in the program. Please note that you will need to complete and file a Committee Recommendation form (Graduate College form) with the Graduate College at least three weeks before your exam date.

2. This examination will be based on the student's thesis proposal and include three parts:

**Part 1a.** A short, 5-6 page **written proposal** written in your own words (see † on the following page) consisting of approximately 3 pages of Background and Significance, 2 pages of Specific Aims, and appropriately formatted references (references are not included in page limit).

\*Students are permitted to receive advice from mentors, other professors, postdoctoral fellows, and students.

\*The student will give each committee member a copy of his/her proposal at least 1 week prior to the scheduled examination. You will also need to submit an electronic copy of your proposal to Dr. Alisa Katzen so that it can be checked for plagiarism using the SafeAssignment software available through Blackboard (see † on the following page).

\*Important components of the written and oral components of the thesis proposal.

a. **Rationale** for hypotheses and experimental approaches and the **experimental support** for this rationale.

b. An acknowledgement of experimental **pitfalls** and suggestions of possible **alternative approaches**.

**Part 1b.** The student's mentor will be asked to fill-in a brief questionnaire regarding the student's progress in the lab.

**Part 2.** An **oral defense of the thesis proposal** for a committee that will include 5 professors, one of which will be from outside the department\*.

There is no precise time limit for the oral exam, but the student should expect it to last approximately two hours, with a short break after one hour.

The student should prepare an oral presentation which will last a **maximum** of 15-20 minutes – committee members are free to interrupt with questions at any time. The student may prepare a PowerPoint presentation, but this presentation should be limited to a maximum of 10 slides with a maximum of 3 introductory slides. The student should be prepared to “use the board” as an aid in answering questions and illustrating his/her points.

\*The student's mentor will not serve on the preliminary qualifying examination committee, but will replace one of the departmental members of the preliminary examination committee as the fifth thesis committee member (and chair) after the preliminary exam is successfully passed. [Note: although the thesis committee is generally composed of faculty that served on a student's preliminary exam committee, the membership can be adjusted with guidance from the student's mentor].

\*The student and his/her mentor decide on the chairperson and membership of this committee.

**Part 3.** Students will be expected to answer **general knowledge questions** posed by the members of the examination committee. In general, these questions will be related to the student's proposal – the student is expected to have extensive background knowledge in these areas and a deep understanding of the proposed and potential alternative approaches. If general knowledge questions have not been raised during the first hours of the oral exam, the committee may choose to focus on these after the break.

### **Thesis Committee Meetings**

Once the student has passed the preliminary exam, s/he will meet with his/her thesis committee a minimum of once per year. At these meetings, the student will present his/her research progress, plans and goals for his/her thesis work, and answer questions from committee members. The committee will consider whether the student is making appropriate progress towards completion of a successful Ph.D. thesis based on the student's presentation and ability to address the committee's questions as well as the mentor's evaluation of the student's progress. The committee will take into consideration the student's research accomplishments, his/her level of commitment to research, technical and intellectual abilities and progress towards functioning as an independent research scientist. If the committee does not feel that adequate progress is being made, it can recommend that the student leave the program with a Master's degree or set specific expectations and goals for the subsequent committee meeting, which can be scheduled for a shorter period than a year at the committee's discretion. Continuation of funding for the student and enrollment in the doctoral program is dependent on the committee's approval.

† **Attentions students:**

With the current ability to obtain electronic versions of scientific papers and reviews, there appears to be an increasing incidence of plagiarism – i.e. instead of using their own words to express their ideas, some students are “cutting and pasting” someone else’s words into their papers or proposals. Even though you will be referencing the scientific papers on which you are basing your proposal, you still need to **USE YOUR OWN WORDING** to communicate the information or ideas, **NOT** the wording from the paper(s).

**OUR EXPECTATIONS:** We are aware that some phrases and even an occasional sentence may be very difficult to rephrase in your own words, but it is not acceptable to “copy and paste” blocks of sentences or paragraphs from other people’s work – and **please note** that “changing a few words” in such text does not make it “OK”. You should be aware that it is relatively easy to pick up “copy and pasted” text using the Google search engine, but that the university has also made plagiarism prevention software called SafeAssignment available through Blackboard.

For definitions of plagiarism and example of what is and is not acceptable, we suggest that you refer to the following websites:

<http://www.chem.uky.edu/Courses/common/plagiarism.html>

<http://www.indiana.edu/~wts/pamphlets/plagiarism.shtml>