

Curriculum in Bioinformatics and Computational Biology Oral Qualifying Exam Guidelines

The following FAQ's addresses common questions about your oral qualifying exam. If you have additional questions, please feel free to contact: Tim Elston - Director, Will Valdar - Deputy Director or John Cornett- Curriculum Administrator.

1. What is the purpose and format of the qualifying exam?

The purpose of the oral qualifying exam is to assess your preparedness for thesis research, including your awareness of previous work, and the merits and feasibility of your research strategy. This exam consists of a written proposal and an oral examination based on the proposal. The student will be evaluated on the clarity and organization by which he or she can articulate both an original research problem and the specific aims for addressing it.

2. What written materials do I need to prepare for the qualifying exam?

You should prepare a written research proposal in the form of a grant proposal. Please note that the crucial aspects of the proposal include: the significance of the research, the novelty of the approach, and a discussion of the expected outcomes. The proposal should begin with one page of specific aims, followed by 6 to 12 typed, single-spaced pages on the project's significance, innovation, and approach. Last should be the bibliography, which has no page limit and should be written for ease of cross-referencing: include all or most authors (for very large author lists, you can omit authors far from the start/end) and article titles, along with typical year/journal information. The proposal should be provided to the committee members at least two weeks prior to the oral exam. You may discuss the proposal with your advisor, but the aims and writing should be your own. The UNC Writing Center also offers one-on-one appointments for editing help.

3. What happens during the oral examination?

The format of the oral examination is an interactive chalk talk. The student should prepare a concise presentation of approximately 15 minutes to summarize the motivation behind the research project and outline the specific aims of the project. During this presentation, the student should expect to be interrupted with questions, yet retain the flow of the presentation. The committee's questions should focus on the dissertation work to determine whether the proposed work is feasible, and whether the student has an adequate grasp of the literature and the skills to accomplish the work in a timely fashion. In order to facilitate an interactive question and answer format, the student will be limited to at most Three Powerpoint slides that can show preliminary data or list specific aims.

4. How should I prepare for this exam?

You should begin studying long enough in advance to make sure you are prepared. Note that it probably will take at a minimum a month to prepare the written proposal. You are encouraged to give a practice talk in front of senior graduate students and postdocs from your lab and other labs with similar research interests.