

Cell Biology Qualifying Exam

Format of the oral exam:

- 1) Prior to the start of the exam, the committee may confer in private with the student temporarily out of the room. The committee may ask the thesis advisor, if present (see below), about the student's performance in lab work.
- 2) The student should list the literature topics broadly relevant to the research proposal, which were defined earlier by the student with the committee's approval. The oral exam begins with the student's presentation of the research proposal, which should be prepared to last no longer than about 20 minutes (~15 slides) although it may take longer if the committee interrupts with questions. The committee may ask questions about the proposal, the literature topics, and basic scientific concepts relevant to both, but the main emphasis of the questions should be to probe the student's ability for critical and analytical thinking (see the 7 specific areas of questioning on pages 2-3). The presentation and questions may take up to 2 hours.
- 3) At the end, the student is excused from the room (the thesis advisor must leave at this point). The committee discusses the student's performance and the chair fills out the attached report. The student returns to the room to be informed of the committee's evaluation, and given an opportunity to ask questions. The student should return completed form to Lisa Crotty (BCMM 136A).

Instructions to the committee chair:

- 1) Moderate the exam so that it goes smoothly and efficiently. Remind the other committee members about the oral exam format, and the student to list the literature topics broadly relevant to the proposal (see 2 above). The committee should ask a broad range of questions to probe the student's ability for critical and analytical thinking (see the 7 specific areas of questioning on pages 2-3), and should not spend an undue amount of time on any particular question or topic.
- 2) Complete the attached report in consultation with the rest of the committee while the student is temporarily out of the room (the thesis advisor must leave at this point). The committee may give the student an overall evaluation of Pass or Fail, or may postpone its decision pending the student's fulfillment of an additional requirement (see page 3). The committee should be honest in its assessment and should make the student (and the DGS) aware of any problem that needs to be addressed. Have the student return to the room in order to be informed of the committee's evaluation, and given the opportunity to ask questions.
- 3) Give the form to the student who will return it to Lisa Crotty (lisa.crotty@yale.edu), the Cell Biology registrar. Copies will then be distributed to the student, the committee, the thesis advisor, and the DGS.

Role of thesis advisor:

The presence of the thesis advisor at the qualifying exam is optional. If present, the thesis advisor cannot answer questions for the student and must leave at the end of the question period before the committee begins to discuss its evaluation.

Cell Biology Qualifying Exam Committee Report

Student's name: _____ **Date of exam:** _____

Thesis advisor's name: _____

Committee members present: _____

Please evaluate the student's performance in each of the following areas by circling appropriate term. If appropriate, please provide specific comments, positive or negative, which could be helpful to the student.

1. Quality of written proposal:

excellent very good good fair unacceptable

Specific comments:

2. Quality of oral presentation:

excellent very good good fair unacceptable

Specific comments:

3. Justification for scientific importance of problem:

excellent very good good fair unacceptable

Specific comments:

4. Thinking critically about the research project, seeing "big picture":

excellent very good good fair unacceptable

Specific comments:

5. Understanding of techniques—mechanisms, strengths and limitations:

excellent very good good fair unacceptable

Specific comments:

6. Anticipating potential problems, including reasons why experiments or project might not work:

excellent very good good fair unacceptable

Specific comments:

7. Knowledge of the scientific literature and concepts directly and broadly relevant to the project:

excellent very good good fair unacceptable

Specific comments:

Please provide any additional comments, positive and/or negative, that would be helpful to the student:

Committee's overall evaluation (please check):

Pass

Fail

Decision pending one or more of the following:

Rewriting proposal

Retaking oral exam

Writing paper on specific topic (please specify length and topic below)

Other (please specify below)

Please specify timeframe for completion of any additional work: _____

Name of committee chair: _____

Signature of committee chair: _____