

Developmental Qualifying exam

The qualifying exam in the developmental area will consist of submitting an application that mimics that of a grant application. The point of this exercise is to ensure that students can,

1. pose an interesting question
2. develop hypotheses
3. design a set of experiments to test those hypotheses

The summer following the third year, students will prove they can do the above by writing a grant proposal. The proposal will consist of the following sections: Specific Aims, Background, Preliminary Data and Research Design and Methods.

The proposal will be a maximum of 7 pages. The first page will be the Specific Aims, which should be a one-page synopsis of the entire proposal. Suggested lengths for the other sections are as follows:

1 page background, 1-2 pages preliminary data, 3-4 pages research design and methods

This can be a study that a student intends to do, or it can be something he or she does not plan to ever do. It must fit within a two-year time frame (dissertation) – experiments must be feasible in terms of time and methodology, but not financially.

In addition to the proposal, each student will submit a CV. In the CV, students should demonstrate that they are qualified to conduct the proposed research. Each student will be given an Investigator score, based on his or her CV. CV's should demonstrate throughput in scholarly activity, such that if there are many abstracts listed, there should also be several first authored publications, to demonstrate that the Investigator is completing the work. The most important aspect is to show involvement in a published paper, preferably first authorship.

There will be at least one reviewer and a discussant. Each reviewer will read his/her assigned grants and prepare a written review, which will be given to the student. The discussant is not required to provide a complete written review. The reviewers will not include the student's doctoral advisor.

Shortly after the grant applications are completed, the DCN faculty will meet to discuss them. The meeting will follow an NIH-like study section format. Each application is discussed separately. The reviewers are asked to give an initial overall score, which ranges from 1-9, with 1 being excellent and 9 being poor. Then each reviewer is asked to critique the grant independently. After all the critiques are presented, faculty are allowed to ask questions or continue the discussion. Once discussion of an application is completed, reviewers are asked to revisit their scores and revise them accordingly (within the range that was offered by all the reviewers) if appropriate. If a reviewer wishes to vote outside of this range, they are asked to state this publicly. At the completion of the proposal review, the director will average the scores (multiply that average by 10) and collect all the reviews, which are then sent to the student. The scores granted will fall in the following ranges: a high pass (average between 10-30), marginal pass (between 31-60) and a fail (between 61-90).

If the student passes, he or she is advanced to candidacy. However, if a student fails, the reviews may be used to improve the proposal and resubmit it. The student will also be allowed to consult with the assigned reviewers to ask any questions concerning the critique. In addition, advisors will be allowed to discuss the reviews with the student. However, advisors may not

offer detailed comments on the proposal before either the first or second submissions. The intention is for students to complete this project as independently as possible. The student may also opt to submit a completely new proposal if he or she so chooses. However, in this case the student will work independently since it is not a revision. The second submission of the proposal will be due approximately three months after initial submission.

Review of the second submission will be treated in the same manner as the first submission. The only exception is in the case of a revised proposal. If the student chooses to revise the original proposal, then the student will be allowed to write a single page in which he or she addresses his or her response to reviews. This page will list the substantive critiques and the ways in which he or she addressed each of these issues. Other scoring and review procedures will follow the same methodology described above. A student who fails to pass the exam on the second attempt will not be advanced to candidacy and will be recommended for dismissal from the program.