

## PhD Qualifying Exam Instructions for Neuroscience Program Students

After successful completion of the Grant Writing course, the student will then be required to complete two written components for their qualifying exam and defend them during an oral exam.

The first written component is to design and defend a single experimental aim that is related to their planned dissertation work, but was not used in the Grant Writing course. This aim must represent original ideas of the student, although they obviously may have been partly influenced by the work in the mentor's lab. No feedback or input from any secondary party should be used to edit or modify the aims. Length is limited to 3 pages, single-spaced, 11 or 12 point font. The expected organization of the aim would likely include: Background, Experimental Design (including Methods, Outcome Measures, Statistical Analysis), Expected Outcomes, Potential Problems/Alternative Approaches. The aim should also contain ample literature citations and include those separately (they are not part of the 3-page limit).

The second written component is to write a 7-page original scholarly response to a challenge question that the qualifying exam committee designs for the student. The topic of the challenge question should not be the same as the planned dissertation work of the student, but could be related to it or simply reflect an area that the advisor and committee would like the student to know more about. It could also reflect a current controversy in the field that the student will benefit from addressing. It is felt that this essay may form part of the basis for a first author publication, or at least be used in the student's dissertation.

The timeline for completion of both written components is not to exceed 4 weeks. The student may work on either component in any order they choose. These must be turned in to the committee at least 1 week prior to the oral examination.

At the oral examination, the student will be evaluated on their specific scientific knowledge related to what they have written, as well as their general knowledge in neuroscience that forms the basis for their planned dissertation work. The specific format of the oral exam is determined by the committee, with voting procedures and possible outcomes as specified by the College of Graduate Studies. Note that the student's primary advisor will participate in all aspects of the exam but will not have voting privileges.