

## Preliminary Exam Guidelines for CMB Students

(January 2023)

The successful completion of a preliminary (prelim) exam, which requires the preparation of a written component and a ~two-hour oral exam, is required to enter PhD candidacy. The successful passing of both must occur by **April 30 of year 2**. This deadline may be waived by the DGS at the request of both the student and mentor due to extraordinary circumstances that are beyond the control of the student. The prelim committee will be chosen by the student in consultation with the mentor and must be approved by the DGS and the Graduate School at least 30 days prior to the scheduled exam. (Complete [this form](#) and submit it to the DGSA and DGS for approval.) The committee will consist of the PhD mentor, a committee chair who is a member of CMB, and at least two additional graduate faculty with appropriate research expertise. Because at least four committee members must be present to administer the oral exam, students are advised to consider recruiting five committee members. It is the responsibility of the student to schedule the exam (the When2Meet website is useful for finding a consensus date and time), reserve the meeting space and inform the committee and the DGSA of the exam date/place. The DGSA will create the exam event in T3 on the student's behalf. Currently, in-person, remote or hybrid exams (e.g., via Zoom) are permitted by the Graduate School. To maintain equity across in-person exams, students are not allowed to provide food or beverages for the committee.

### Format of written prelim document

The goal of the written document is to demonstrate proficiency in the student's field of study with respect to understanding pertinent literature, applying appropriate techniques, posing incisive questions and hypotheses to address them, and designing and interpreting experiments. Students should discuss specific aims with the mentor and are encouraged to obtain constructive feedback during the preparation of the prelim document. The mentor is not allowed, however, edit the final document before it goes to the committee. The format of the proposal is that of an NIH F31 application. Arial font no smaller than 11 point must be used, text should be single-spaced, and margins cannot be smaller than 0.5 inches. Required components must be assembled in the following order:

- A descriptive **title** of 200 characters (including spaces) or less.
- A project **summary/abstract** of 30 lines or less. This should be a succinct description of the proposed work that can stand on its own and can be understood by a scientifically literate reader who is not an expert in the specific area of research.
- **Specific aims** are limited to one page and introduce the background/importance of the study, the specific objectives and expected outcomes, and the impact of the study on the specific research field.
- The **research strategy** section is limited to six pages, which includes supporting (and readable) figures/tables. A reference list is not part of the six-page limit. Relevant background and foundational studies, including any preliminary data, should be described (1-2 pages) and the remainder should focus on how each specific aim will be accomplished, including methodology/techniques, data interpretation, possible problems, and alternative approaches.
- **References** have no page limit. Primary studies should be cited as appropriate, not just reviews. Titles must be included for all references and numbers (rather than author and year) should be used for in-text citations. References should be arranged in the order cited in the text.
- A list of **abbreviations** used in the proposal should be included at the end.

### Written prelim proposal submission

The final, revised document and an up-to-date CV must be directly emailed to committee members at least **one week** before the scheduled exam and both must be deposited in T3.

### **Oral prelim exam**

The prelim committee names, prelim proposal, updated CV, and prelim date, time, and location *must* be entered by the student with the help of the DGSA in T3 prior to the oral exam. To prepare for the exam, students are encouraged to schedule “mock” exams with the mentor and lab members, as well as with other graduate students. The oral exam will last for approximately **two hours** and its purpose is to determine whether the student has the sufficient knowledge base, critical thinking skills and competencies to continue on the PhD track. The exam will begin with a brief faculty-only discussion of the student’s academic and research progress to date. The student will then present a **30-minute oral presentation** of the proposed research, after which the student will be questioned by the committee members. Interruptions during the presentation should be made only as points of clarification. Although questions will focus primarily on the proposed research, relevant general knowledge is expected as well as demonstration of critical thinking skills. During the exam, the mentor is a silent observer who is not allowed to ask or answer questions. Following the exam, core competency areas will be evaluated by each committee member, including the mentor, using T3. Because T3 constitutes the official exam record, faculty must complete and submit their T3 exam evaluations before announcing the result to the student or leaving the exam room. Four passing scores are required for the student to pass the oral exam; if the committee chair votes to fail, then the student automatically fails. The student will be informed of the outcome immediately after all T3 responses are entered. The committee may provide verbal advice to the student at the end of the exam, and T3 evaluations and comments should be discussed by the student and the mentor. In the event of failure, the committee votes on whether the student will be allowed to take the exam again. The re-take must occur no sooner than three months and no later than six months after a failed exam. The examining committee must remain the same and the vote to pass the re-take must be unanimous. Failure to pass the oral exam on the second try results in automatic dismissal from the Graduate School. If 24 eligible graded credits and other Graduate School requirements have been completed at the time of the re-take, a master’s degree can be conferred.