DEPARTMENT OF ORAL HEALTH SCIENCES GENERAL EXAMINATION

A. Purpose of Ph.D. General Examination

- 1. The purpose of the general exam is "an inclusive evaluation of the candidate's mastery of the major and related fields of study, including the tools of research in which competence has been certified." As administered Oral Health Sciences Graduate Program, for the Ph.D. degree, the general consists of two components: a written research proposal in research grant application format, and an oral defense of this proposal.
- 2. Additionally the purpose is determine if the student is capable of recognizing questions appropriate for research projects, developing these questions into a written research proposal, and orally defending the proposal.
- 3. A final purpose is provide the student an opportunity to receive feedback from the Supervisory Committee on the proposed research project.

B. Preparation

Prior to scheduling the General Exam, a student must:

- Identify a Supervisory Committee
- Meet with the entire Supervisory Committee at least once to discuss the exam plans and confirm that the committee finds the student adequately prepared to successfully pass the exam.

C. Format

- 1. The student will take the General Examination in the second or early in the third year of graduate work.
- 2. This examination will be administered by the Supervisory Committee.
 - a written Ph.D. thesis project proposal in the form of an NIH grant.
 - an oral presentation and defense of the proposal in front of the Supervisory committee
- 3. The Ph.D. thesis research proposal will be chosen with the approval of the student's thesis advisorand members of the Supervisory Committee.
- 4. The written proposal will broadly follow the general format of National Research Service Award (NRSA) Fellowship Applications (F31, F32, F30). The instructions are here: https://grants.nih.gov/grants/how-to-apply-application-guide/forms-f/fellowship-forms-f.pdf. The only required portions are
 - Specific Aims (described on page F-64),
 - Research Strategy (F-65 to F-66).
 - Bibliography and References Cited (page F-40).
- 5. The Specific Aims section will be no longer than one page. The Research Strategy section will be limited to 6 pages. Note that no budget or administrative pages will be required. Students will not be penalized for a lack of preliminary results supporting the proposal,

and students should not delay scheduling the exam in order to obtain preliminary results. Detailed formatting instructions are included below ("Department of Oral Health Sciences General Exam Format").

- 6. The student should plan to spend four to six weeks preparing the written application. The student will distribute copies of the proposal to all the members of the Supervisory Committee and to the Graduate Program Coordinator at least 7 days prior to the presentation.
- 7. The oral examination will generally be 2 hours in duration and will comply with Graduate School regulations.

D. Evaluations and Outcomes

The student's performance on the oral exam will be evaluated by the thesis Supervisory Committee. If the student's performance should be less than satisfactory, then the Supervisory Committee will make appropriate recommendations to the OHS graduate faculty.

There are three possible outcomes to the General Exam:

1. Satisfactory (Pass)

In the event of a report of satisfactory (pass), the supervisory committee will report to the Graduate Program Director and the student that the student has been advanced to candidacy for the Ph.D. degree.

2. Reservations (Conditional Pass)

In the event of a report of reservations, the supervisory committee will report these reservations in writing to the Graduate Program Director and Department Head for transmission to the Graduate College and the student. The student must satisfactorily address the reservations in a timely manner, as specified in the written report from the committee. On the recommendation of the supervisory committee, remediation to address the reservations may include:

- assignment of additional course work
- assignment and discussion of specific readings
- further examination in a particular area
- rewriting of portions of the proposal
- specified academic or research work as appropriate.

When the reservations have been addressed to the satisfaction of the supervisory committee, the committee will so inform the Graduate Program Director, the Graduate School and the student.

3. Unsatisfactory (Fail)

In the event of a report of unsatisfactory, the student may request a re-examination that must be scheduled within the quarter following that in which the first examination took place. The re-examination cannot take place sooner than two months, nor longer than 12 months, after the first examination. Permission for re-examination must receive the approval of the supervisory committee. A second failure of this examination will result in dismissal of the student from the Ph.D. graduate program. In the event that the request for re-examination is denied, the student will immediately be dismissed from the OHS Ph.D. Graduate Program.

Department of Oral Health Sciences General Exam Format

The General Exam requires preparation of a Research Plan or proposal in the format of an NIH grant. This plan should include sufficient information needed for evaluation of the proposed PhD project independent of other documents. It should be specific and informative, and include relevant backgroundmaterial, preliminary findings, and methods. You will need to discuss your specific aims with your mentor; however, writing the proposal is yourresponsibility. Give copies of the General Exam to your PhD advisory committee at least ten days prior to your scheduled exam.

The proposal (Research Plan)

Overall Format

The General Exam written document should have the format of an NIH Fellowship application, which is outlined below.

- a. Title Page. (One page)
- b. **Specific Aims**. **(One page** Arial 11 font minimum, minimum 0.5 margins**)** List the broad, long-term objectives and what the specific research proposed in thisapplication is intended to accomplish. State the hypotheses to be tested.

c. Research Strategy

For the remaining sections, please keep the *entirety* to six pages single space, Arial 11 font minimum, minimum 0.5 margins, not including Literature Cited, which can be any length.

Background and Significance. Briefly sketch the background leading to the present application, critically evaluate existing knowledge, and specifically identify the gaps which the project is intended to fill. State concisely the importance and health relevance of the research described in this application by relating the specific aims to the broad, long-term objectives.

Preliminary Studies. Use this section to provide an account of preliminary studies pertinent to the application. These preliminary studies may have been carried out by the student, but need not to have been.

Research Design and Methods. Clearly state a <u>falsifiable hypothesis</u>, supported by the preliminary studies, and the experiments that will test it. Describe the research design and the procedures to be used to accomplish each of the specific aims of the project. Include how the data will be collected, analyzed, and interpreted. Describe any new methodology and its advantage over existing methodologies. Clearly state expected results that will support the hypothesis, and alternative results that will not support the hypothesis, and how you will interpret them. Include a separate paragraph on Potential Pitfalls, which are ways that your experiment might not work – note, that this is different from the experiment working, but the results not supporting the hypothesis.

Literature Cited. List all references. Each reference must include the title, names of all authors, book or journal, volume number, page numbers, and year of publication. The reference should be limited to relevant and current literature. While there is not a page limit for references, it is important to be concise and to select only those literature references pertinent to the proposed research.

Graduate School General Exam URL: https://grad.uw.edu/policies-procedures/doctoral-degree/