## SCHOOL OF DENTAL MEDICINE OFFICE OF GRADUATE STUDIES CASE WESTERN RESERVE UNIVERSITY

## INSTRUCTIONS FOR THE PREPARATION OF A THESIS PROTOCOL

#### PLEASE READ CAREFULLY

In order to provide assistance to graduate students, this set of instructions has been prepared as an aid to **thesis protocol** preparation. It is advisable that you follow these instructions so that the approval of your protocol is not delayed.

#### **PURPOSE**

The purpose of the thesis protocol is to provide the graduate student and their thesis committee with an outline for conducting the research project. Properly designed, the protocol should allow the student to understand the what, why, when, and how questions that are associated with the execution of their project. Consult your department chair on the formation of a thesis committee (see STEP 1below). Until full agreement exists between the student, the thesis committee, and those assigned for administrative oversight, the project should not be started. One or more revisions of the protocol are to be expected. It is important that some members of the committee have expertise in the area of research being proposed so as to provide advice, direction, and supervision to the student. If expertise is lacking, or if revision fails to improve the protocol, the project should be abandoned in favor of a different project that is more likely to meet with common approval and available expertise. It is far better to have the protocol rejected than the completed thesis. Therefore, a properly developed and approved thesis protocol will help guide the student and increase the likelihood that the thesis and its defense might be accepted.

## **TIMING**

The graduate programs at the School of Dental Medicine vary in length. Thus, the time for thesis protocol development and submission will vary. In general, the graduate student should be engaged in their program of study for a sufficient length of time to allow them to become familiar with the literature in their field and to identify areas in need of further study. Although the faculty can be helpful in identifying areas for further study, it should be one in which the student has some (special) interest. A year or more is normally needed for an approved protocol to be executed, and a thesis prepared, defended, revised, and accepted.

#### **STEPS**

1. Consult with your program director as to when and how to form a thesis committee. This is usually done at least one year prior to the anticipated time of your completion of the program. Your department chair will choose a faculty member to serve as your primary thesis advisor. This advisor will also serve as the chair of the thesis committee. The primary thesis advisor will help identify other members of the faculty (at least two) to serve as secondary advisors and as members of the thesis committee. Members of the thesis committee continue in their capacity until the student is graduated or leaves the program of study. The thesis committee will be responsible for guiding the student in the development of a thesis protocol. Once a protocol is acceptable, the thesis committee members advise the student on the conduct of the research and writing of the thesis document. Ultimately, the committee members will evaluate the student's oral defense of the thesis.

2. Once your these committee has been formed, it is probably a good idea to

- 7. After your protocol receives administrative approval, develop a detailed literature review. Once you actively engage in the execution of the project, be certain that experimental design is being followed as planned and that the data is analyzed according to the protocol. If the protocol needs to be modified, check with your committee and get their permission first. Modification of a project to the point of doing a project markedly different from the project started will require the development and approval of a new protocol before continuing.
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authors alphabetically as opposed to numerically.

The next element is a <u>STATEMENT OF THE QUESTION/THESIS</u>, <u>OBJECTIVE OF THE STUDY</u>, or the <u>HYPOTHESIS</u> that has been supported by the Literature Review. This is followed by a detailed plan, which includes the <u>EXPERIMENTAL DESIGN</u> to address the question (objective/hypothesis). This aspect must follow scientific method. It must be well thought out, thorough, focused, and controlled to generate results (data) that can be analyzed and might help to answer the question posed. The student must be capable of using the instruments, techniques, etc., outlined in the plan, or have available expertise. The next element is a way to analyze the data generated with application of using statistics of appropriate <u>STATISTICAL</u>

# Thesis Protocol Approval Form Case Western Reserve University

### Case Western Reserve University School of Dental Medicine Office of Graduate Studies

INSTRUCTIONS TO GRADUATE STUDENTS: Please complete this side of the form and present it to your thesis committee chairperson (primary advisor) who will complete the reverse side following your protocol presentation to your thesis committee. Please note that the members of your committee MUST BE

## **Thesis Protocol Approval Form**

(this side to be completed by thesis committee chairperson)

INSTRUCTIONS TO THESIS COMMITTEE CHAIRPERSON: Please sign-off that the protocol for the student's thesis has been critically reviewed by the committee for the following elements and meets with the committee's approval:

| Literature review               |  |
|---------------------------------|--|
| Hypothesis/objective            |  |
| Experimental design             |  |
| Statistical analysis design     |  |
| Reference list/literature cited |  |
| Budget and time                 |  |