



THE UNIVERSITY OF BRITISH COLUMBIA

DEPARTMENT OF MEDICAL GENETICS

MASTER OF SCIENCE THESIS DEFENCE GUIDELINES

OVERVIEW

The Faculty of Graduate and Postdoctoral Studies (G+PS) sets the thesis basics, formatting and final thesis submission requirements for MSc students in all UBC programs. The Medical Genetics Graduate Program sets its program-specific guidelines for the thesis content and defence procedures, and schedules the defence.

Approval to Write the MSc Thesis:

Prior to writing the thesis, the MSc candidate in Medical Genetics must schedule a meeting with their Supervisory Committee. The Committee is to discuss the thesis content with respect to scientific adequacy and give formal approval for the student to write-up.

FACULTY OF GRADUATE AND POSTDOCTORAL STUDIES REQUIREMENTS

Scope of the Master's Thesis:

A Master's thesis must demonstrate that the student knows the background and principal works of the research area, and can produce significant scholarly work. It should contain some original contribution whenever possible.

Preparation and Submission of the Master's Thesis:

- Graduate and Postdoctoral Studies provides [resources](#) and sets the criteria for [thesis preparation](#).
- The MSc student should forward a draft thesis to G+PS for a [pre-review](#) early in the preparation stage; and again when the thesis is nearly ready for examination.

MEDICAL GENETICS GRADUATE PROGRAM REQUIREMENTS

- The general length of an MSc thesis in the Medical Genetics Graduate Program is 35 – 75 pages including figures and references. The student must explain their contribution on every figure in their thesis.
- Following submission of a signed Medical Genetics form, *Approval of Thesis for Defence*, the Graduate Program Assistant will schedule the student's thesis defence. (See below for more details.)
- MSc students are required to hold an exit seminar which is scheduled prior to the defence.

Approval of the Draft Thesis:

The student's Research Supervisor is to read the complete thesis in draft form. The appropriate revisions should be made before the rest of the student's Supervisory Committee reads the thesis. Members of the student's Supervisory Committee normally return their comments to the student **within three weeks** of receiving the thesis. The suggested changes must be made to the thesis and then approval signed-off by the Supervisory Committee before the defence is scheduled.

Sample Timeline for Thesis Completion and Defence:

Overall, it is suggested that the student allow approximately three months for the final stages of editing the draft thesis, scheduling and defending their thesis. See the Medical Genetics "[Guidelines and Forms](#)" webpage for required forms.

	Approximate Time Required	Action
Step 1		Obtain permission to write thesis from student's Supervisory Committee. Forward Committee Meeting Report to Graduate Program Assistant, Cheryl Bishop, at medical.genetics@ubc.ca .
Step 2		Complete draft thesis; obtain approval from research supervisor(s).
Step 3	3 weeks	Submit draft thesis to student's Supervisory Committee.
Step 4	1 week	Make changes to thesis as advised by student's Supervisory Committee.
Step 5	2 weeks	Forward signed <i>Master of Science - Approval of Thesis for Defence</i> form to Program Assistant and allow two weeks for defence scheduling.
Step 6	3 weeks	Submit thesis to Examination Committee to read prior to the defence. Complete the <i>Master of Science Thesis Defence Program</i> template and email to Graduate Program Assistant prior to defence.
Step 7	1 week	Make required changes to thesis following defence and submit to FoGS. Apply to graduate and see information about ' rolling graduation '.
	10 weeks*	*From thesis approved by research supervisor to defence.

Scheduling the MSc Thesis Defence:

- After the thesis approval form is submitted, the student should forward the title and a brief abstract to the Program Assistant who will ask Dr. Matthew Lorincz, Graduate Advisor, to appoint the Thesis Defence Chair. The student's Supervisor should email Dr. Lorincz (mlorincz@mail.ubc.ca) with several suggestions for the University Examiner.
- The Program Assistant will schedule the defence. Note: The Program Assistant requires up to two weeks for scheduling a defence. If time is limited, the supervisor should make the required arrangements. The examination must be scheduled for **three hours**. If the supervisor schedules the defence, please advise the Program Assistant of the defence details.
- The Program Assistant will email a confirmation of the scheduled defence to the Defence Examination Committee; and the *Master of Science Thesis Defence Examination Form* to the Chair prior to the defence.

Thesis Defence Examination Committee:

The Examination Committee consists of a minimum of three members (excluding the candidate's supervisor):

- A Chair from the Department of Medical Genetics.
- A University Examiner (a UBC faculty member not on the student's Supervisory Committee).
- An examiner from the student's Supervisory Committee.

Purpose of the Examination:

The purpose of the MSc defence examination is to evaluate the candidate's knowledge: 1) in the areas of specialization in his/her research program, and 2) of general human genetics (as covered by the core Medical Genetics courses). The ability to reason and to integrate knowledge of the discipline related to the student's thesis project will be emphasized.

The exam is intended to assess whether the student has developed:

- Strong critical thinking abilities;
- Breadth and knowledge of the relevant discipline;
- Academic background for the specific Master's degree research;
- Clear ability to communicate knowledge of the discipline.

Questions to Consider in Preparing for the Examination:

1) Scholarly introduction:

- a) What is known (published literature)?
- b) Why is the question worth asking?

2) How does the approach address the question?

- a) Methods: Full description of approaches and experiment protocols.

3) Results chapter(s):

- a) What is the question being addressed?
- b) What approach has been taken?
- c) Data tables with figures (legends).
- d) What is the result?

4) Discussion:

How do the results of this thesis integrate into the published literature (introduction); and what is the interpretation of the data? Comment on how these results contribute to the knowledge in the field.

Thesis Defence Examination Format:

The Chair is an active examiner; the supervisor can examine too, but does not vote. The three examiners will be responsible for assessing if the thesis and defence merit a pass or fail upon consultation with the supervisor.

Thesis Defence Procedures:

*Prior to the thesis defence, the Chair is to **read** the following procedures to the Examination Committee and the student; and direct the examination as follows:*

- **Ask** the student to present a 15-25 minute summary of their thesis. (An audience is allowed in the examination room.)
- **Round One:** Call on each examiner and the supervisor to question the student for approximately 20 minutes: the examiners first, and then the supervisor.

- **Round Two:** As in Round One (if required, proceed to Round Three).
- **Ask** for questions from others in the room.
- **Ask the student to leave the room.**
- **Lead a discussion** of the thesis and examination:
 - Is the written thesis of the standard expected for an MSc student in Medical Genetics?
 - Did the candidate present the work and respond questions adequately?
 - What are the supervisor’s comments?
- **Request a pass/fail vote** (orally or written ballot) from each examiner. After consultation with the supervisor, the examiners must come to an agreement on the outcome of the examination.
- **Add comments** on the departmental *Master of Science Thesis Defence Examination Form* and circle “Pass” or “Fail”. All Examination Committee members must sign this form.
- **Ask** the student to return to the room to receive the outcome of the vote. At that time, the student will be informed by the Examination Committee of any changes recommended for the final thesis.

Following a Successful Defence:

The Chair forwards a scan of the signed Medical Genetics form immediately to the Medical Genetics Graduate Program Assistant.

Estimated Timeline for Thesis Submission Following the MSc Defence:

Steps to editing and submitting final defended thesis to G+PS	Approximate number of days to complete steps after defence
<ul style="list-style-type: none"> • Make required changes to final thesis and submit to Supervisor/Committee. 	1-5 days
<ul style="list-style-type: none"> • Obtain signatures on the G+PS Master’s Thesis Approval form. • Complete other applicable forms and submit all forms at the same time to G+PS. • Create cIRcle account and set password. • Send email to graduate.thesis@ubc.ca to activate account. 	1- 2 days
<ul style="list-style-type: none"> • You will receive an email once your forms have been processed confirming that you can submit your thesis to cIRcle. 	2-3 days
<ul style="list-style-type: none"> • You will receive feedback regarding your thesis formatting. Make required changes. 	2-3 days
<ul style="list-style-type: none"> • You will receive an email notification that your thesis has been approved. Your thesis submission is now complete. • Your scholarship / award / funding will be terminated immediately. 	1 – 2 days

Prior to graduation, you may request a “[Graduate Program Completion Letter](#)” from SSC that confirms that you have completed all degree requirements.