The Graduate Program in Cell and Developmental Biology

The final Master's research thesis defense

The CELL Program Advisory Committee is responsible for overseeing the final M.Sc. examination, which includes a formal oral defense of the student's research thesis. The M.Sc. defense is open to the public.

Procedures

<u>Obtain permission to write thesis</u>. A student must obtain permission to write his/her thesis at a meeting of their Advisory Committee, at which the student should discuss the proposed outline of their thesis. This meeting typically takes place 4 – 6 months before a student intends to defend their thesis. The report of the Advisory Committee meeting, which must be forwarded to the <u>Program Coordinator</u> [cell.grad@ubc.ca] must indicate that the Committee has given the student permission to write-up.

<u>Write thesis.</u> The research supervisor will read the complete thesis in draft form, and necessary revisions must be made before all of the other members of the student's Advisory Committee read the thesis. The examination copy of the thesis must not be submitted to the Examiners until the revisions suggested by all members of the Advisory Committee have been incorporated. This must be indicated on the attached sign-off form ('Advisory Committee approval of Master's thesis for defense') which should be forwarded to the <u>Program Coordinator</u> [cell.grad@ubc.ca].

Establish Examination Committee and set date for oral defense. A student should discuss possible choices of Examination Committee members with his/her Research Supervisor. The Committee must consist of:

- Chairperson. Once the date for the oral defense has been set, the student should contact the Director of the CELL Program who will appoint a CELL Program faculty member to act as Chair. The Chair of the Examination Committee ensures that questioning is fair and relevant and that the student has adequate opportunity to demonstrate his/her knowledge; the Chair will not engage in the questioning of the student except where he or she feels that clarification is needed.
- Three examiners. At least one of the Examiners must not be on the student's Advisory Committee and at least one of the Examiners must be external to the Program; if both of these criteria are satisfied by a single person, two additional Examiners to a total of three Examiners will need to be appointed. The Examiners are responsible for assessing the quality of the written thesis and the oral defense. Note that the student's research supervisor is expected to attend the oral defense but does not play a role in the examination and does not vote; only members of the Examination Committee ask questions and evaluate the student.

At least two weeks prior to the defense, the student:

- distributes the final thesis to all members of the Examination Committee, including the Chair.
- prepares an oral presentation for the defense.
- notifies the <u>Program Coordinator</u> [cell.grad@ubc.ca] of the thesis title and the date, time, and location of the defense. Two weeks notice is required for this information, to allow university-wide notification (M.Sc. defense examinations in the CELL Program are public).

<u>The oral defense.</u> Immediately prior to the defense, the Chair should inform those present about the format of the examination.

- The student will present a 20 25 minute summary of their thesis.
- The oral presentation will be followed by a first round of questions from each of the Examiners. Each Examiner can question the student for up to 20 min.
- After the first round of questions, each Examiner will be offered the opportunity to ask additional questions for 5 10 min.

- Members of the audience will then be offered the opportunity to question the candidate.
- At the end of questioning, the Chair will ask everyone except the Examination Committee and the student's research supervisor to leave. The Chair will ask the supervisor for a brief statement about the student's performance during the course of his/her degree then he or she may also be asked to leave.
- The Chair will then moderate a discussion of the student's written thesis and performance during the oral examination. At the end of the discussion, the Chair will request a Pass or Fail vote from each Examiner (a % grade is <u>not</u> required). The final decision to pass or fail is by simple majority; in the case of a tie, the Chair will cast the deciding vote.
- The student will then be called back into the room and informed of the Committee's decision. At this time, the student will also be given constructive feedback on specific areas of strength and weakness and will be informed of any changes recommended for the final thesis. These should also be documented on the attached form ('M.Sc. thesis defense report') which must prepared by the Chair of the Examination Committee at the end of the oral defense, signed by the student and the Research Supervisor, and forwarded to the Program Coordinator [cell.grad@ubc.ca].

If no or only minor changes to the written thesis are required by the Examiners, the Chair should also obtain the Examiners' signatures on the <u>G+PS Master's thesis approval form</u> which should be given to the Research Supervisor for eventual forwarding to G+PS (with a copy to the CELL Program Coordinator). If more substantive changes to the thesis are required, one or more of the Examiners may withhold their signature(s) pending the completion of the required changes.

Following a successful defense.

- The student makes the changes required by the Examiners, obtains their Research Supervisor's sign-off on the <u>Master's thesis approval form</u>, and submits the form (copied to the <u>Program Coordinator</u>) together with the final version of the thesis and <u>other required forms</u> to the Faculty of Graduate and Postdoctoral Studies.
- To have your <u>degree conferred and to graduate</u> you must make a formal application for graduation through the <u>Student Service Centre</u>.
- Prior to conferral of their degree, the student may request a <u>Graduate Program Completion Letter</u> from G+PS which confirms that they have completed all degree requirements.

The Graduate Program in Cell and Developmental Biology

Advisory Committee approval of Master's thesis for defense			
Name of Student:	Student #:		
Thesis Title:			

The research supervisor will read the complete thesis in draft form, and necessary revisions must be made before all of the other members of the student's Advisory Committee read the thesis. The examination copy of the thesis must not be submitted to the Examiners until the revisions suggested by all members of the Advisory Committee have been incorporated.

I have read the above titled thesis and approve it for submission to the External Examiner:

Name	Signature
Supervisor:	
Committee member:	
Committee member:	
Committee member:	
Student's signature:	Date:
Please return completed form (scan or fax) to:	
Peggy Faulkner CELL Graduate Program Coordina	ator
cell.grad@ubc.ca Fax: (604) 822-2316	

The Graduate Program in Cell and Developmental Biology

M.Sc. thesis defense report

This form must be completed by the Chair of the Examination Committee at the end of the oral defense, signed by the student and the Research Supervisor, and forwarded to the <u>Program Coordinator</u> [cell.grad@ubc.ca].

Name of Student:	Student #:
Thesis Title:	
Supervisor:	Date of defense:
Examiners:	
Chair:	

<u>Summary of Defense</u> (including areas of strength and weakness, and summary of any changes recommended for the final thesis)

Final Recommendation	Pass	🗖 Fail
Student's signature:		
Supervisor's signature:		