



Molecular & Cellular Biology Graduate Program

AN INTERDISCIPLINARY PHD PROGRAM OFFERED THROUGH THE UNIVERSITY OF
WASHINGTON AND FRED HUTCH

MCB

Student

Handbook

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1. PROGRAM INTRODUCTION

1.1 Overview

We are delighted to welcome you to our graduate community. This handbook has been prepared as a comprehensive guide to provide you with essential information and resources to support your academic, professional, and personal development.

Contained within these pages are detailed descriptions of program expectations, academic regulations, student support services, and milestone checklists. Our objective is to ensure that your graduate experience is both enriching and transformative, equipping you with the knowledge, competencies, and professional networks to excel in your chosen field.

Please familiarize yourself with the content of this handbook and consult it regularly through your academic tenure. Your success is important to us, and we remain committed to supporting you through each stage of your academic journey.

Welcome to the Molecular and Cellular Biology (MCB) program – we look forward to your scholarly contributions and achievements as a valued member of our graduate community.

1.2 Mission Statement

MCB is an interdisciplinary graduate program jointly offered by the University of Washington (UW) and the Fred Hutchinson Cancer Center (FH). With exceptional faculty across five institutes, MCB provides broad and flexible training in the life sciences, opens opportunities at the forefront of technology development, and encourages team building, mentorship, and leadership. MCB students tailor their education to meet their scientific and career goals.

1.3 Program Governance

The program is co-administered by the University of Washington (UW) and Fred Hutchinson Cancer Center (FH). The program is governed by two co-directors (one from UW and one from FH) and a steering committee. The UW Graduate School and FH Office of Education & Training provide administration and funding support to the program. More information regarding program governance, including steering committee members, is available on the [MCB website](#). The program is also supported by [administrative staff](#) at UW and FH.

1.3.1 Interdisciplinary Faculty Group

Members of the Interdisciplinary Faculty Group are graduate faculty as outlined in Graduate School [Policy 4.4](#). They are voting members of the MCB Steering Committee who vote on all formal decisions made on behalf of the program, formal action on the curriculum, leadership, and appointment of new members.

1.3.2 Steering Committee

The Steering Committee includes the Interdisciplinary Faculty Group, students, and staff. The Steering Committee advises program directors on new initiatives and curricula changes. A current list of Steering Committee members is available on the MCB website. The committee meets twice a year in May and November.

1.3.3 Curriculum Committee

The Curriculum Committee includes one co-chair from UW, one co-chair from Fred Hutch, the MCB co-directors, and MCB staff. The committee meets quarterly and surveys curriculum needs, facilitates development of new MCB courses, evaluates current courses, and recruits faculty instructors.

1.3.4 Area Directors

The MCB Program is guided by nine Areas of Interest (AOI), which are the most common research areas among program faculty and students. To keep information within each AOI updated, area directors, made up of student and faculty members, are appointed.

Area Directors can advise students about their research area, courses, and labs (rotation or permanent). They also work with the Curriculum Committee to identify opportunities for new courses.

For a current list of Area Directors, please visit the [MCB Area of Interest webpage](#). You can select each Area of Interest's webpage to view the Area Directors for that area.

2. PROGRAM INFORMATION



2.1 Financial

2.1.1 Academic Student Employee

Graduate student employees working in support of research are governed by the [UW/UAW contract for Academic Student Employees \(ASEs\)](#). Appointments are normally fifty percent (50%). Policies on workload, vacation, and paid leave are included in this contract. **Vacation leave must be approved by the supervisor (PI) and follow the lab's home department/division policies.**

It is important for students to understand that they have two concurrent roles at MCB; they are students, and they are employees.

2.1.2 Payroll

The current salary for MCB students is listed under the Sch.1 & 3 under Biomedical Research Departments in the [Variable Rate RA Salary Schedule](#). E.g., from July 1, 2025 to June 30, 2026, the rate was \$4,035/month.

2.1.3 Insurance

MCB students receive health insurance (medical, dental, and vision) through the Graduate Appointment Insurance Plan (GAIP). Students are automatically enrolled in GAIP once their appointment in the UW payroll system (Workday) is complete. GAIP insurance coverage is on a month-by-month basis for the duration of your appointment. Students should contact uwgaip@uw.edu and/or LifeWise with questions.

2.1.4 Student Fiscal Services

It is important to set up a 'student' direct deposit account. Direct deposit is a process where a student can assign a checking/savings account to their student account with Student Fiscal Services (SFS) to pay tuition fees or receive a refund. The deposit account is set up via MyUW. This is a separate account from your 'employee' Workday direct deposit. For more information about how to set up a separate direct deposit account, visit the [UW Finance website](#).

2.1.5 Student Fees

Students are required to pay quarterly fees by the [tuition deadlines](#) to avoid late charges or account holds. Students can find the current fees at the [UW Office of Planning & Budgeting website](#).

2.1.6 MCB Fellowship

MCB students receive a one-off \$1,500 fellowship upon entering the program. This award will be distributed within the first few weeks of joining the program. Students have previously used this fellowship to offset moving expenses or to purchase a new laptop. There are no restrictions on the use of these funds.

MSTP students are not eligible for this award.

2.1.7 MCB Travel Awards

MCB students receive a one-time \$2,000 award to cover travel expenses to conferences. You can find additional information on the [MCB website](#). Students must be presenting a talk or poster at the conference to request the one-time travel award.

2.1.8 UW Travel Awards

MCB and MSTP students who will be presenting their research at scientific conferences are eligible to apply for the following travel awards:

[Graduate and Professional Student Senate's Travel Grant](#)

[Graduate School's Conference Presentation Award](#)

2.2 Certification Programs and Concurrent Degrees

2.2.1 Master's degree in Epidemiology

MCB students may earn a concurrent Master's degree (MS) in Epidemiology in the second year of their PhD Program. Students must apply for an MS degree in Epidemiology at the same time they apply for the MCB PhD Program. Students in this concurrent degree program will have two mentors. Funding for the MS degree is provided by a training grant. Visit the [UW Department of Epidemiology's website](#) for more information.

2.2.2 Master's degree in Business Administration

MCB students may earn a concurrent Master's in Business Administration (MBA) through UW Bothell. Students must pass their General Exam and receive approval from their thesis advisor before applying to the MBA Program. Funding for the MBA is provided by the student. Visit [UW Bothell's website](#) for more information.

2.2.3 Certificate in Data Science Option

MCB students may earn a certificate in Data Science. This certificate will appear on the transcript. Students may apply for this option at any time starting in their first year. Students participating in the Data Science Option must complete nine credits covering three of the [four identified topic areas](#) and participate in two quarters of the [eScience community seminars](#). Aside from these distinct requirements, all other requirements for the Data Science Option are the same as the existing PhD in MCB. Visit the [MCB website](#) for more information.

2.2.4 Bioexternship

To provide an opportunity for students to gain working experience in a local biotechnology company, MCB offers an externship to students in summer quarter after their first year, after they have completed three rotations and identified a dissertation lab. Students must apply to participate in the externship and those who are approved to participate will work on a project created by the biotech partner for 10 weeks.

Students will focus on company research rather than their doctoral research and will be treated as company researchers. They will gain first-hand knowledge of what it is like to work in a biotechnology company, learn new techniques, and make valuable connections. Visit the [MCB website](#) for more information.

2.2.5 Medical Scientist Training Program (MSTP)

MSTP students may join the MCB Program through the MCB/MSTP application process that occurs during autumn quarter prior to the start of their PhD degree. Please contact the MCB office at mcb@uw.edu for more information.

3. ACADEMIC INFORMATION

3.1 Academic Requirements

To receive a PhD from MCB, students must meet the following requirements. Detailed information for these requirements will follow in later sections of the handbook.

Complete three lab rotations

MCB students are required to complete three lab rotations during their first year. Rotations can be with current MCB faculty or with faculty who are in the process of applying for MCB affiliation.

Join a permanent lab

MCB students are required to join a permanent lab after three lab rotations during their first year and maintain a permanent position in a lab until graduation.

Complete first year course series

MCB students are required to complete the first-year course series MCB 514/515/516 during their first year.

Complete variable research credits

MCB students are required to receive credit for MCB research. MCB 599 is for research done during a rotation. MCB 600 is for research conducted towards receiving Candidacy and prior to passing the General Exam. MCB 800 is for research conducted towards completing a PhD after the General Exam.

Form a supervisory committee

MCB students are required to form a five-person supervisory committee by the end of winter quarter in their second year. The supervisory committee is composed of the student's advisor, a Graduate School Representative, and at least three other members. The majority of the committee need to be MCB faculty.

Complete two Teaching Assistantships

MCB students are required to complete two teaching assistantships (TAs) prior to graduation. One TA must be an academic TAsip. The second TA may be either an academic TAsip or a community outreach TAsip. To learn more about the difference between the TAsips, visit the [MCB website](#).

MSTP students are required to complete one academic TAsip.

Hold annual supervisory committee meetings

MCB students are required to hold a supervisory committee by the end of **every** spring quarter beginning in their second year. MCB students may have more than one supervisory committee meeting per year.

Complete the Biomedical Research Integrity (BRI) course

MCB students are required to complete the Biomedical Research Integrity (BRI) course by the summer before their third year.

Complete 18 graded credits

MCB students are required to complete 18 graded credits at the 500 level, in alignment with the UW Graduate School's requirement (reference: [UW Graduate School Policy 1.1](#)). Students must receive a 2.7 or higher grade for the course to count toward the graded-credit requirement. Graded credit courses must be completed before taking the General Exam. For a list of courses that count towards this requirement, visit the [MCB website](#).

Maintain a 3.0 grade point average

MCB students are required to maintain a 3.0 grade point average (GPA) at all times, in alignment with the Graduate School's requirement (reference: [UW Graduate School Policy 1.1](#)). If a GPA falls below 3.0, the student has one quarter to bring the GPA back to or above 3.0.

Graduate-level credits requirement for General Exam

MCB students are required to complete 60 graduate-level credits before taking the General Exam in alignment with the Graduate School's requirement (reference: [UW Graduate School Policy 1.1](#)). This will be a combination of research credits, graded course credits, and courses taken as Credit/No Credit.

General Exam

MCB students are required to pass their General Exam by the end of autumn quarter of their third year.

Graduate-level credits requirement for Final Exam

MCB students are required to complete 90 graduate-level credits before taking the Final Exam in alignment with the Graduate School's requirement (reference: [UW Graduate School Policy 1.1](#)). This will be a combination of research credits, graded course credits, and courses taken as Credit/No Credit.

MCB 800 credits requirement for Final Exam

MCB students are required to complete 27 MCB 800 credits before taking the Final Exam in alignment with the Graduate School's requirement (reference: [UW Graduate School Policy 1.1](#)).

Final Exam

MCB students are required to pass their Final Exam. The final exam is the oral defense of their thesis.

Written thesis

MCB students are required to submit their written thesis in the same quarter as the Final Exam. Students may petition the MCB co-directors to upload their thesis in the quarter following their Final Exam.

Seven year limit

MCB students are required to meet all the above academic requirements, including a thesis that makes a significant contribution to knowledge and clearly indicates training in research, in alignment with the Graduate School's thesis requirement (reference: [UW Graduate School Policy](#) 1.1.4.3). MCB students are required to graduate within seven years of starting in the program.

3.2 Program Curriculum

MCB students are required to complete 18 graded credits before taking the General Exam and 90 graduate-level credits before taking the Final Exam. The following courses are mandatory and will occur at different points during your graduate studies.

- MCB 514/515/516 - First year course
- MCB 580 – Teaching practicum
- MCB 599 – First year rotations
- MCB 600 – Independent Study/Research
- MCB 800 – Doctoral Dissertation

For additional course information and descriptions, visit the [MCB Curriculum webpage](#).

3.2.1 Areas of Interest

Each of MCB's nine Areas of Interest has a set of suggested courses. These are meant to be guidelines to help MCB students choose classes, **they are not requirements**. It is highly encouraged for students to take the Foundational courses in the Area(s) of Interest they are primarily interested in. Elective courses are more specialized and often cross between multiple Areas of Interest.

To learn more about the suggested curriculum, visit each individual [Area of Interest webpage](#).

3.2.2 MCB 514/515/516

The MCB 514/515/516 course series is required for all first-year MCB students.

MCB 514 – MCB Tutorial is taken during autumn quarter and highlights the skills associated with a productive, engaging and timely PhD.

MCB 515 – MCB Literature Review is taken during winter quarter and helps students develop skills to present research and engage an audience.

MCB 516 – MCB Grant Development is taken during spring quarter and helps students develop skills to write and review grants.

3.2.3 Electives

MCB students are required to complete 18 graded credits at the 500 level, in alignment with the UW Graduate School's requirement (reference: [UW Graduate School Policy](#) 1.1).

For a list of courses that count towards the 18-graded credits requirement, visit the [MCB website](#). This list consists of courses taken by former MCB students and courses recommended by the Area of Interest

Directors. For courses not included on this list, students must reach out to the [MCB Office](#) to confirm whether the course will count towards the 18-graded credits requirement **before registering**.

Students may take 400-level courses, however they must seek MCB Co-Director approval **before registering** for the course. Only **one** 400-level course will count towards the 18-graded credits requirement.

3.3 Course Registration

3.3.1 Enrollment Requirement

MCB students are required to enroll as full-time graduate students in autumn, winter, spring, and summer quarters. Full-time enrollment in autumn, winter, and spring quarter is 10-18 credits. Full-time enrollment in summer quarter is two credits. MCB students are also required to be enrolled in the quarter they take their General Exam, Final Exam, and submit their written thesis.

3.3.2 Variable Research Credits: MCB 599

MCB students register for MCB 599 during rotations in the first year. The number of MCB 599 credits depends on the number of elective credits a student opts for in each quarter.

3.3.3 Variable Research Credits: MCB 600

MCB students register for MCB 600 after joining a permanent lab and before passing the General Exam. The number of MCB 600 credits depends on the number of elective credits a student opts for in each quarter.

3.3.4 Variable Research Credits: MCB 800

MCB students register for MCB 800 after passing the General Exam. The number of MCB 800 credits a student registers for depends on the number of elective credits they opt for each quarter.

3.4 Advising

3.4.1 Coursework Advising

MCB students are assigned to an MCB co-director in the first year, who can provide coursework advising. Area Directors can also provide coursework advising.

3.4.2 Academic Advising

MCB students register for MCB 800 after passing the General Exam. The number of MCB 800 credits a student registers for depends on the number of elective credits they opt for each quarter.

3.5 Rotations

3.5.1 Lab Safety Training

MCB students are required to complete Lab Safety Training before the start of their first lab rotation. Training is provided by UW's Department of Environmental Health & Safety (EH&S). Registration information and training requirements are sent by EH&S to incoming students in the summer before they begin the program. MCB students may substitute prior EH&S training from UW or Fred Hutch if the training was within the past year.

3.5.2 Rotations Overview

MCB students complete three rotations in their first year before choosing their permanent thesis lab. Each rotation is about 10 weeks (the duration of an academic quarter). Students must notify the MCB Outreach and Communications Specialist of which lab they will be rotating in each quarter and provide written confirmation from the faculty member or Principal Investigator (PI) of the rotation. The deadline for rotation confirmation is the first day of each quarter (reference: [UW Academic Calendar](#)).

Students and PIs must submit a rotation report at the end of the quarter providing an overview of the rotation and feedback for the other party.

Funding (compensation, benefits, tuition) is provided by the MCB Program during a student's rotations. Once a student has selected a permanent lab, funding responsibilities are transferred to the PI and their home department or division.

3.5.3 Rotation Talks & Poster Session

Students present a talk (autumn and winter quarters) and poster (spring quarter) on their rotation project at the end of each quarter. The rotation talks are split between two days – the Monday and Tuesday of Finals Week of autumn and winter quarter. The Spring Poster Session typically occurs on the Monday or Tuesday of Finals Week during spring quarter.

MSTP students are expected to present on their thesis project either during the autumn or winter Rotation Talks (once, not during both quarters), depending on their availability. All MSTP students will present a poster during the Spring Poster Session.

Each student will be assigned two other student presenters to submit a peer evaluation for, for both the Talks and Poster Session. Attendance at both Rotation Talks and Poster Session is **mandatory for all first years**.

3.5.4 Rotation in non-MCB faculty lab

Students requesting to rotate with a faculty member who does not hold MCB faculty membership **must submit a request** to the program co-directors **at least five weeks** before the rotation is set to begin.

The PI must meet MCB's faculty membership requirements as outlined in the [MCB Governance Plan](#) and [MCB Faculty Application](#).

The PI must agree to become an MCB faculty member if the student selects the PI's lab as their permanent lab.

3.5.5 Fourth rotation

A fourth rotation may be an option at the discretion of the MCB Program and available funding. Students considering a fourth rotation should contact the program co-directors as early as possible to discuss a fourth rotation.

3.6 Permanent Dissertation Lab

3.6.1 Contract

To join a permanent lab, a student must receive and accept an offer from an MCB faculty member. The student and faculty member will receive a contract that must be signed by each of them and the Chair or Director of the faculty member's department or division.

3.6.2 Funding support

Faculty members are responsible for providing student funding (compensation, benefits, tuition support) as outlined in the contract. Students are also encouraged to apply for additional funding through training grants and fellowships.

3.6.3 Second-year student faculty mentoring workshop

MCB provides a second-year student-mentor workshop on an annual basis for eligible MCB faculty mentors and their students. This workshop is required training for second-year students and their permanent lab PIs. First-year MSTP/MCB students are also required to take this workshop.

The goal of the workshop is to promote productive mentoring between MCB students and their advisors. The workshop is offered virtually and facilitated by the program co-directors. The 60-minute workshop consists of a general group discussion about mentoring, a breakout session for each pair to discuss mentee-mentor expectations (private breakout room), and a small group discussion and review of case studies.

3.6.4 Third year and beyond meeting with co-directors

MCB students are invited to attend a yearly meeting with the program co-directors for a group discussion of upcoming milestones and post General Exam experiences.

3.7 Supervisory Committee

3.7.1 Members of the supervisory committee

MCB students are required to form a Doctoral Supervisory Committee by the end of winter quarter of their second year. Students are encouraged to select members from different participating institutions to promote productive scientific interactions across the program. The committee evaluates progress toward a PhD; approves passing of the General Exam; determines readiness to take the Final Exam (or thesis

defense); and approves passing of the Final Exam. The committee also provides mentorship in scientific research and career development.

The Supervisory Committee must have a minimum of five members as follows:

- One Chair
 - The student's faculty advisor who is endorsed by the Graduate School.
- One Graduate School Representative (GSR)
 - The GSR represents the Graduate School and attests to the validity of the General Exam and Final Exam.
 - The GSR must be endorsed by the Graduate School and cannot be affiliated with the same UW department or Fred Hutch division as the Chair.
- Three other committee members
 - At least one must be outside of the Chair's department or division.
 - At least two must be MCB faculty.
 - The majority of the committee must be endorsed by the Graduate School.

MCB Membership

The majority of supervisory committee members (including the Chair) must be MCB faculty.

Graduate School Endorsement

The majority of supervisory committee members must be endorsed by the Graduate School (reference: [Graduate School Policy](#) 4.1).

Graduate School Representative (GSR)

One committee member must serve as the Graduate School Representative (GSR). In alignment with the Graduate School's policies regarding the GSR (reference: [Graduate School Policy](#) 4.2), the GSR attests to the validity of examinations and indicates approval of the process by which examinations are conducted. Additionally, the GSR may serve as an advocate for the student throughout the PhD process.

3.8 Annual Supervisory Committee Meeting

3.8.1 Meeting Cadence

All MCB students are required to hold at least one Committee Meeting (60-90 minutes) by the last day of spring quarter every year starting in their second year. The meeting is an opportunity for the committee to guide, assist, and evaluate progress toward a doctoral degree. The General Exam does not replace a Committee Meeting.

3.8.2 Attendance

Annual supervisory committee meetings must have three committee members in attendance, including the Chair to meet quorum. The GSR is not required to attend supervisory committee meetings.

3.8.3 Format

The committee meeting agenda should include:

- Updates on progress toward meeting MCB requirements
- Review of the updated IDP
- Student Presentation
- Committee Discussion
- Completion and signing of Annual Committee Meeting Report form

Additional information can be found in the Supervisory Committee Meeting Guidelines document on the [MCB website](#).

3.8.4 Documentation

MCB students are required to submit the following documents to their committee one week before the committee meeting:

- One-page summary of research accomplishments since the last Supervisory Committee Meeting (or since joining the lab if this is the first meeting)
- A copy of the updated IDP
- A copy of the Committee Meeting Guidelines
- Any meeting abstracts or publications accepted and grants awarded since the last Supervisory Committee Meeting

3.8.5 Documentation submission

MCB students are required to submit the documents above and the signed supervisory committee report to the MCB Program within one week after the committee meeting. A link to the submission portal is available on the [MCB website](#).

3.9 General Exam

3.9.1 Supervisory Committee Approval

The Supervisory Committee determines when a student is ready to take their General Exam. The committee's approval must be documented on the Annual Supervisory Committee Report before the General Exam can be scheduled.

3.9.2 General Exam Format

The General Exam consists of a written proposal and an oral examination. The written proposal is similar to an NIH NRSA Fellowship grant application. The oral examination consists of two parts:

1. The first part is a presentation and discussion of the student's research area – concepts, background, significance, questions, and the current state of knowledge.

2. The second part is a presentation and discussion of the research project's experimental approaches.

The General Exam must be **conducted in-person**. Committee members are required to attend the exam in-person and **at least four committee members** must be present to reach quorum – the Chair and GSR must be two of these four. Additional information is available on the [MCB website](#).

3.9.3 General Exam Chair

A committee member other than the Thesis Committee Chair (PI) must chair the General Exam. The General Exam Chair facilitates discussions and questions, monitors examination time, determines the exam decision, and gathers signatures on the Committee Signature form. Additional information is available on the [MCB website](#).

3.9.4 General Exam Outcomes

There are three possible recommendations for a General Exam, each with its own outcome and processes:

- 1) **The candidate is recommended to proceed with studies leading to the doctoral degree.**

This recommendation leads to the conferral of Candidacy and continuation toward a PhD.

- 2) **The candidate must be reexamined after a further period of study and requires resubmission of a Request for General Examination to the Graduate School.**

The Dean will approve up to two reexaminations except under extraordinary circumstances. This recommendation leads to up to two re-examinations and changes in satisfactory progress and performance status as follows:

- a) After making the first re-examination recommendation, the committee will determine which quarter the student will retake the General Exam. The MCB Program will recommend to the Graduate School that the student's progress and performance status change to Academic Alert (additional information available in the Satisfactory Progress and Performance section of this handbook) through the quarter the General Exam is retaken. If the General Exam is passed, candidacy is conferred, and the student's progress and performance status returns to Satisfactory.
- b) If the committee recommends a second re-examination, the committee will again determine which quarter the student will take the General Exam for a final time. The MCB Program will recommend to the Graduate School that the student's progress and performance status change to Final Academic Alert through the quarter the General Exam is retaken. If the General Exam is passed, candidacy is conferred, and the student's progress and performance status returns to Satisfactory. If the General Exam is not passed, the MCB Program will recommend that the student receive a Final Drop from the program the following quarter.

- 3) **The candidate is not recommended for further work towards the doctoral degree.**

The effect of this recommendation is termination of the student's enrollment in the doctoral program. This recommendation leads to an immediate Final Drop from the MCB Program.

3.10 Graduation

3.10.1 Supervisory Committee Approval

The Supervisory Committee determines when a student is ready to graduate. The committee's approval must be documented in the Annual Supervisory Committee Report before graduation can be scheduled.

3.10.2 Publication Requirement

The MCB Program does not require a publication before graduation. However, the program defers to the supervisory committee's regarding need for publication prior to graduation.

3.10.3 Reading Committee

After the committee has approved graduation and a defense date has been set, the student will form the reading committee. The reading committee consists of three members of the supervisory committee and must include the thesis advisor. The reading committee ensures that the dissertation is a significant contribution to knowledge and is an acceptable piece of scholarly writing (reference: [Graduate School Policy](#) 4.2.2.7).

3.10.4 Final Exam

The Final Exam is the oral defense of the dissertation. At least four committee members, including the thesis advisor and the GSR, are required to attend the Final Exam. These committee members will make one of three recommendations after the Final Exam. Additional information about the final exam is available on the [MCB website](#).

3.10.5 Final Exam Outcomes

There are three possible recommendations for a Final Exam, each with its own outcome and processes:

1) **The candidate passed the examination.**

This recommendation leads to the conferral of a PhD.

2) **The candidate must be reexamined after a further period of study.**

This requires resubmission of a Request for Final Examination to the Graduate School. This recommendation leads to one reexamination and a change in satisfactory progress and performance status as follows:

After making the reexamination recommendation, the committee will determine which quarter the student will retake the Final Exam. The MCB Program will recommend to the Graduate School that the student's progress and performance status change to Final Academic Alert through the quarter the Final Exam is retaken. If the Final Exam is passed, a PhD is conferred.

3) **The candidate is not recommended for further work towards the doctoral degree.**

The effect of this recommendation is termination of the student's enrollment in the doctoral program. This recommendation leads to an immediate Final Drop from the MCB Program.

3.10.6 Submission of Written Thesis

MCB students must electronically submit their written thesis by 11:59 p.m. (Pacific Time) by the last day of the quarter they take their Final Exam (reference: [Graduate School Student Dates & Deadlines](#)). Students may petition the program co-directors to submit their thesis in the quarter following their Final Exam.

3.10.7 Approval of Written Thesis

The written thesis must be approved by both the reading committee and the Graduate School. The reading committee approves the written thesis and must submit their approval through the [MyGrad program](#) by the last day of the quarter in which the student submits their written thesis. The Graduate School will review the thesis after the quarter ends.

3.10.8 Graduation Date

The official graduation date is the last day of the quarter that a thesis is approved by both the reading committee and the Graduate School.

3.10.9 Seven Year Time to Degree

MCB students are required to graduate within seven years of starting the program. Students who have not scheduled their Final Exam by autumn quarter of their seventh year must petition to graduate after seven years.

Petition to graduate after seven years

Students who have not graduated by autumn quarter of their seventh must submit the following by the fifth week of winter quarter of their seventh year:

- Petition with declaration of intent to graduate by end of summer quarter of their seventh year, which must include:
 - Letter to MCB co-directors stating intent to graduate by end of summer quarter of their seventh year
 - Email of support from each member of their Supervisory Committee

OR

- Request for extension beyond their seventh year with evidence of progress towards degree

The program co-directors will inform the student by spring quarter if the petition to graduate by the end of summer quarter, or for an extension beyond the student's seventh year is approved. If the petition is not approved, the student must graduate by the end of summer quarter and the MCB Program will recommend to the Graduate School that the student's progress and performance status change to Final

Academic Alert for that quarter. If the student does not graduate in summer quarter, the MCB Program will recommend Final Drop to the Graduate School for the following autumn quarter.

Students who receive approval to continue beyond their seventh year must submit a progress report towards graduation to the program co-directors each quarter beginning winter quarter of their seventh year.

3.11 MCB Master's Degree

3.11.1 Pre-General Exam

MCB students may opt to receive a master's degree (MS) as a terminal degree. The requirements to receive an MS if a student **has not passed** the General Exam are:

- Receive approval from MCB Program to receive an MS
- Complete 18 graded credits with all grades above 2.7 prior to requesting MS
- Form three-person MS supervisory committee, including thesis advisor
- Write and submit scholarly document in alignment with supervisory committee parameters
- Approval of final scholarly document by supervisory committee and MCB co-directors
- Maintain enrollment in quarter receiving MS

3.11.2 Post-General Exam

The requirements to receive an MS if a student has passed the General Exam are:

- Complete 18 graded credits with all grades above 2.7 prior to requesting MS
- Receive approval from supervisory committee to receive MS
- Receive approval from MCB Program to receive an MS
- Maintain enrollment in quarter receiving MS

3.12 Satisfactory Progress and Performance

MCB students must maintain satisfactory performance and make consistent progress towards completing their PhD in accordance with the Graduate School's Academic Performance and Progress Policy (reference: [Graduate School policy](#) 3.7). Satisfactory performance and progress status is determined by meeting the expectations and requirements outlined in the MCB Requirements Grid document (found on the [MCB Program Requirements website](#)) and the criteria listed below. Additionally, students are expected to adhere to the University of Washington's [Student Policies](#).

3.12.1 Performance and Progress Measures

The following requirements and timelines apply to all MCB students. The MCB Graduate Program Advisor and co-directors monitor progress toward these milestones on a quarterly and yearly basis.

- Receive credit for first-year course series, MCB 514/515/516

- Join permanent lab by end of spring quarter of first year
- Maintain position in permanent lab until graduation
- Complete two Teaching Assistantships prior to graduation
- Form a supervisory committee by end of spring quarter of second year
- Complete BRI lectures by end of summer quarter of second year
- Complete 18 graded credits
- Maintain a 3.0 or higher grade point average
- Meet with supervisory committee by end of spring quarter every year starting in second year
- Graduate within seven years

Performance and progress are evaluated by MCB co-directors and faculty members at key milestones. The table below outlines the required outcomes and evaluators for each milestone. Timelines for these milestones are available in the [MCB Requirements Grid](#).

Milestone	Required Outcome	Documentation	Evaluator
MCB 514/515/516	Credit (CR) grade in series	Transcript	MCB co-directors
MCB 599 (Rotation Research)	Credit (CR) grade	Rotation Report	Rotation PI and MCB co-directors
Annual supervisory committee meeting	Full expectations met or exceeded	Indicated on annual supervisory committee report	Supervisory committee and co-directors
Approval to proceed to General Exam	Approved to take General Exam	Noted on annual supervisory committee report	Supervisory committee
General Exam	"The candidate be encouraged to proceed with studies leading to the doctoral degree"	Noted on the signed committee signature form	Supervisory committee
Approved to proceed to Final Exam and graduation	Approved to take Final Exam	Noted on annual supervisory committee report	Supervisory committee
Final Exam	"The candidate passed the examination"	Noted on the signed committee signature form	Supervisory committee
Approval of written dissertation	Approval by each Reading Committee Member	Submitted in MyGrad Program	Reading Committee

3.12.2 Changes in Satisfactory Performance and Progress Status

If a student fails to meet one or more of the milestones, their status can change from Satisfactory to one of the following three unsatisfactory statuses. As stated in the Graduate School policy 3.7

(reference: [Graduate School policy](#)): “these status levels are used to indicate unsatisfactory performance, to communicate clear expectations to the student, and to outline consequences should those expectations not be met in the time indicated. The goal of each step is to establish clear expectations and outline a path to return to satisfactory progress.”

Academic Notification

This is an **internal** MCB status issued when a student has failed to meet one or more expectations related to academic performance or progress. It is an early intervention to provide the student with additional support and guidance. The MCB Program issues an Academic Notification letter with clearly defined milestones and timelines required to return to Satisfactory status. The Graduate School is not notified of this status change. Academic Notification duration may vary, lasting one or more quarters, depending on the missed milestone. Program co-directors determine whether Academic Notification status can extend beyond the initial quarter.

Academic Alert

This status is assigned when a student fails to resolve performance or progress issues previously communicated to the student through the Academic Notification process. The MCB Program issues an Academic Alert recommendation letter to the student with a copy to the Graduate School. The Academic Alert letter includes:

- The reason for the Academic Alert
- Steps the student must take to remove the Academic Alert
- Consequences if steps are not taken to remove the Academic Alert

The Academic Alert status may last from one quarter to three quarters, depending on the missed milestone, unless otherwise specified. Program co-directors determine whether Academic Alert status can extend beyond the initial quarter.

Final Academic Alert

This status is used when a student has not resolved the documented issues related to their Academic Alert status. The MCB Program sends a Final Academic Alert recommendation letter to the student with a copy to the Graduate School. Upon review and acceptance, the Graduate School will send an additional letter from the Dean of the Graduate School notifying the student of their Final Academic Alert status.

The MCB Program typically allows one quarter of Final Academic Alert before initiating an Academic Drop from the program, except in clearly documented exceptional cases. The Final Academic Alert letter will include:

- The reason for the Final Academic Alert
- Steps the student must take to remove the Final Academic Alert
- A statement that the student may be dropped from the program if the required steps are not taken to remove the Final Academic Alert

The Final Academic Alert status may last one quarter unless extraordinary circumstances warrant an extension. Should the Final Academic Alert status extend beyond one quarter and additional progress or performance issues arise, the Final Academic Alert may be escalated to an Academic Drop, superseding the original timeframe outlined in the Final Academic Alert recommendation.

3.12.3 Academic Drop

As stated in the Graduate School policy (reference: [Graduate School policy 3.7](#)), an Academic Drop is an official action that terminates a student's enrollment in a graduate program. This may occur if a student fails to resolve the issues documented in the student's Final Academic Alert status letter, or under specified conditions outlined under the **Expedited Status Changes** section. If a student does not meet the milestones and requirements specified in their Final Academic Alert letter, the MCB Program will recommend Academic Drop to the Graduate School. Upon Graduate School approval, the drop status will appear on the student's official transcript and formal Academic Drop letters will be sent to the student from the program and from the Dean of the Graduate School.

When dropped, a student is not eligible to complete the program or return later to complete the degree and may be removed from any currently enrolled courses. A student who is dropped from one graduate program may apply to and enroll in a different graduate program if accepted.

3.12.4 Expedited Status Changes

While students typically progress through Academic Notification, Academic Alert, and Final Academic Alert before an Academic Drop, certain circumstances may warrant expedited status changes. These include:

Missed Milestone	Expedited Status
Fourth Rotation	Academic Alert
Retest result for General Exam	Academic Alert
Failure of General Exam	Immediate Academic Drop
Failure of Final Exam	Immediate Academic Drop

3.12.5 Good Standing

MCB students in Satisfactory, Academic Notification, or Academic Alert status are considered in good standing. However, Academic Notification and Alert statuses indicate unmet requirements and can lead to Final Academic Alert status. Students in Final Academic Alert status are no longer in good standing.

3.12.6 Academic Status and Leave or Reinstatement

MCB follows the Graduate School Policy (reference: [Graduate School Policy 3.7.6](#)) regarding academic statuses, leave status, and reinstatement.

3.12.7 Appeals

Appeals related to academic status follow the Graduate School Policy, Academic Grievance Procedure (reference: [Graduate School Policy 3.8](#)).

3.13 Leave of Absence and Changing Labs

MCB students are encouraged to consult with the MCB GPA regarding leave options and about changing labs.

4. Appendices

4.1 MCB Requirement Grid

	Year 1	Year 2	Year 3	Year 4-6*
Autumn	Courses • MCB 599: Rotation • MCB 514: Lit Review • Elective Credits* Credit Total: 13 Tasks • Rotation Talk	Courses • MCB 600: Research • MCB 580: TA* • Elective Credits* Credit Total: 10 Tasks • Begin BRI Training • Attend TA training	Courses • MCB 600: Research Credit Total: 10 Tasks • Complete General Exam by end of quarter	Courses • MCB 800: Research Credit Total: 10 Tasks • Schedule or complete Final Exam*
Winter	Courses • MCB 599: Rotation • MCB 514: Lit Review • Elective Credits* Credit Total: 13 Tasks • Rotation Talk	Courses • MCB 600: Research • MCB 580: TA* • Elective Credits Credit Total: 10 Tasks • Form Supervisory Committee by last day of quarter • Schedule Supervisory Committee Meeting • Meet with Advisor to formulate IDP	Courses • MCB 800: Research Credit Total: 10 Tasks • Schedule Supervisory Committee Meeting	Courses • MCB 800: Research Credit Total: 10 Tasks • Schedule or complete Final Exam*

	Year 1	Year 2	Year 3	Year 4-6*
Spring	Courses • MCB 599: Rotation • MCB 516: Lit Review • Elective Credits* Credit Total: 13 Tasks • Select TAships • Select permanent lab by Friday in May • Rotation Poster Session	Courses • MCB 600: Research • MCB 580: TA* • Elective Credits Credit Total: 10 Tasks • Complete BRI Training • Meet with Supervisory Committee by last day of quarter • Submit committee documents by last day of quarter	Courses • MCB 800: Research Credit Total: 10 Tasks • Meet with Advisor to update IDP • Meet with Supervisory Committee by last day of quarter • Submit committee documents by last day of quarter	Courses • MCB 800: Research Credit Total: 10 Tasks • Meet with Advisor to update IDP • Meet with Supervisory Committee by last day of quarter • Submit committee documents by last day of quarter • Schedule or complete Final Exam*
Summer	Courses • MCB 600: Research or • UCONJ 510: Intro Biostat (optional) Credit Total: 2 Tasks • Outreach TAship • Biotechnology Externship (optional)	Courses • MCB 600: Research or • UCONJ 510: Intro Biostat (optional) Credit Total: 2 Tasks • Schedule General Exam by end of quarter • Outreach TAship	Courses • MCB 800: Research Credit Total: 2	Courses • MCB 800: Research Credit Total: 2 Tasks • Schedule or complete Final Exam
Notes	*18 graded elective credits and 60 grad level credits required to take General Exam	*Register for academic TA in quarter TA occurs. Register for outreach TA after completion.	*27 MCB 800 research credits required to graduate	*7 year limit to graduate

Seven Year Limit

	Year 7
Autumn	Requirements Complete Final Exam
Winter	Requirements By the 5 th week of Winter quarter, submit one of the following: • Petition with declaration of intent to graduate by end of Summer quarter of Year 7. Petition must include: ○ Letter to MCB Co-Directors stating intent to graduate by end of Summer quarter of Year 7 ○ Email of support from each member of Supervisory Committee or • Request for extension beyond Year 7 with evidence of project towards degree
Spring	Requirements Receive Petition Decision from Co-Directors. If Petition is denied by Co-directors: • Student placed on Final Academic Alert for Summer quarter • Student must graduate by end of Summer quarter
Summer	If all requirements for graduation are not completed by the end of Summer quarter, the UW Graduate School will automatically remove the student from UW enrollment.

4.2 MSTP Requirement Grid

	Year 0.5	Year 1	Year 2	Year 3	Year 4-5*
Autumn		Courses • MCB 600: Research • MCB 514: Lit Review • Elective Credits Credit Total: 13 Tasks • Rotation Talk*	Courses • MCB 600: Research • MCB 580: TA* • Elective Credits Credit Total: 10 Tasks • Attend TA Conference • Complete General Exam by end of quarter	Courses • MCB 800: Research Credit Total: 10	Courses • MCB 800: Research Credit Total: 10
Winter		Courses • MCB 600: Research • MCB 515: Lit Review • Elective Credits Credit Total: 13 Tasks • Form Supervisory Committee by end of quarter • Meet with Advisor to formulate IDP • Schedule Supervisory Committee meeting • Rotation Talk*	Courses • MCB 800: Research* • MCB 580: TA* • Elective Credits Credit Total: 10 Tasks • Schedule Supervisory Committee meeting	Courses • MCB 800: Research Credit Total: 10 Tasks • Schedule Supervisory Committee meeting	Courses • MCB 800: Research Credit Total: 10 Tasks • Schedule Supervisory Committee meeting

	Year 0.5	Year 1	Year 2	Year 3	Year 4-5*
Spring	Courses • MCB 600: Research • Elective Credits Credit Total: 13 Tasks • Begin research • Begin elective credits	Courses • MCB 600: Research • MCB 516: Lit Review • Elective Credits Credit Total: 13 Tasks • Select TAs • Meet with Supervisory Committee by end of quarter • Submit committee documents by end of quarter • Poster Session	Courses • MCB 800: Research* • MCB 580: TA* • Elective Credits Credit Total: 10 Tasks • Meet with Advisor to review IDP • Meet with Supervisory Committee by end of quarter • Submit committee documents by end of quarter	Courses • MCB 800: Research Credit Total: 10 Tasks • Meet with Advisor to review IDP • Meet with Supervisory Committee by end of quarter • Submit committee documents by end of quarter	Courses • MCB 800: Research Credit Total: 10 Tasks • Meet with Advisor to review IDP • Meet with Supervisory Committee by end of quarter • Submit committee documents by end of quarter
Summer	Courses • MCB 600: Research Credit Total: 2 Tasks • Continue research	Courses • MCB 600: Research Credit Total: 2 Tasks • Schedule General Exam by end of quarter	Courses • MCB 800: Research Credit Total: 2	Courses • MCB 800: Research Credit Total: 2	Courses • MCB 800: Research Credit Total: 2
Notes		*One rotation talk in Autumn or Winter quarter 18 graded credits and 60 grad level credits required to schedule general exam	*Register for TAs in quarter that it occurs 27 MCB 800 credits required to graduate		*5 year limit to graduate

4.3 Annual Doctoral Supervisory Committee Meeting Report

UW Molecular & Cellular Biology Program

Student: _____ **Meeting Date:** _____

Current Progress Outcome: (please check the appropriate box that best reflects the student's **research and academic progress** since their last Supervisory committee meeting or, if in the end of their 2nd year, since they joined the lab)

	IDP discussed and suggestions offered
--	--

	Full Expectations Met or Exceeded Student progressed as anticipated or better, and remains on track for on-time graduation
	Partial Expectations Met – Student made partial progress; there are <u>some</u> concerns about on-time graduation – Student required to schedule additional Supervisory Committee Meeting in _____ months
	Subpar Expectations Met – Student made unsatisfactory progress; there are <u>serious</u> concerns about completion of the doctoral degree – Student required to schedule additional Supervisory Committee Meeting in _____ months – The Committee recommends to the MCB Directors that the Student be placed on academic alert in the quarter following this meeting.

Description of Academic/Research Progress (Please define strengths AND weaknesses. To be completed by Committee)

Other Recommendations (If weaknesses are identified, please recommend remedies. To be completed by Committee)

Committee Members Attending (Chair and 2 additional members required)

Committee Chair Name (print)

Signature

Committee Member Name (print)

Signature

Student Signature: _____ Date: _____

*Submit this signed form, one-page research summary and current Individual Development Plan to [MCB's Annual Committee Documents portal](#) within **one week** of the meeting.*

4.4 General Exam Format Guide

Molecular and Cellular Biology Graduate Program General Examination Format

MCB General Examination Timelines

Student Tasks

Task	Deadline
Schedule General Exam Date with Supervisory Committee and email date to Maia Low	Last day of Summer Quarter of Year 2
Select General Exam Chair to facilitate exam <i>A committee member other than the PI must chair the exam</i>	At least 4 weeks before exam
Reserve venue for General Exam	As soon as General Exam date is set
Schedule General Exam in MyGrad Student View <i>List the PI, not the Exam Chair, as the Chair of Supervisory Committee</i>	At least 4 weeks before exam
Receive Committee Signature Form and other documents from Maia	At least 4 weeks before exam
Confirm credit requirements are met <i>Must meet 18 total graded credits. Confirm in Academics Tab of Grades Box in MyUW.</i>	At least 4 weeks before exam
Email Written Proposal and General Exam Format Guide to Supervisory Committee	At least 2 weeks before exam
Complete General Exam	Last day of Autumn Quarter of Year 3
Submit signed Committee Signature Form to Maia	3 days after General Exam
Register for MCB 800 <i>Faculty Code remains the same as MCB 600</i>	Quarter after passing General Exam

General Exam Chair Tasks

Task	Deadline
Review MCB General Examination requirements and timings below	At least 3 weeks before exam
Review MCB General Examination rubric	At least 3 weeks before exam
Email MCB General Examination Rubric to Supervisory Committee	At least 2 weeks before exam
Facilitate discussion and questions	At General Exam
Monitor examination time	At General Exam
Determine decision and gather signatures on Committee Signature Form	At General Exam

MCB General Examination Sections

Written Proposal

The proposal is written by the student. The format is similar to an NRSA application. The PI may provide feedback on the Specific Aims and on a preliminary draft of the Approach. However, it is expected that the final version reflects the student's ideas.

Font size: Times size 12 or Arial size 11, 1/2-inch margins, single spaced.

Recommended Document Length: Seven pages including figures, not including references or the abstract. The Committee may not want to read more than this and may appreciate a shorter proposal. No supplemental material should be included.

Submission to Committee: The Written Proposal and this General Examination Format document must be submitted to the Supervisory Committee at least 2 weeks before the General Examination. After submitting the Written Proposal to the Committee, students are encouraged to contact committee members to inquire about possible areas of questioning.

Experiment Design: Design experiments that generally correspond to the amount of work one person can accomplish in a 3-year time span. Most proposals will have two to three Aims.

Written Proposal Format

The proposal format is similar to a NIH NRSA Fellowship grant.

1. Abstract

Length: 300 words or less

The Abstract uses broad, general language to summarize the primary goal(s) and motivation of the research, the significance of the research, and the choice of experimental approach. The Abstract should be accessible to any molecular-cellular biologist and should avoid technical jargon and acronyms.

2. Specific Aims

Length: One page maximum

Concisely state the goals of the proposed research program and summarize the expected outcome(s), including the impact that the results of the proposed research will exert on the research field(s) involved. Succinctly list the specific objectives of the proposed research. Provide a two to three sentence summary for each Aim.

3. Research Strategy

Length: Six page maximum not including references.

The research strategy has three sections: Significance, Innovation and Approach. Describe the significance of the research proposed including how the proposed research will advance the field. The innovation section should highlight methodological and/or conceptual novelty in the proposal. The approach section will be the longest. For each Specific Aim, address the following four topics:

1. Rationale behind aim
2. Any relevant preliminary data (performed by student or the lab)
3. Experimental design and methods
4. Expected outcomes, potential problems and alternative approaches

The approach section should also include a timeline for accomplishing the aims and sub-aims.

Oral Examination

The first part of the Oral Examination is reserved for presentation and discussion of the student's research area - concepts, background, significance, questions, and the current state of knowledge. It also covers related, basic principles of molecular and cellular biology. The second part of the Oral Examination is a presentation and discussion of the research project's experimental approaches. **Please note that MCB students will not bring food and drink to the General Exam.** Committee members are welcome to bring their own beverages and lunch if so desired. The oral portion of the MCB General Exam must be **conducted in-person**. Committee members are required to attend the exam in-person and **at least four committee members** must be present to reach quorum – the Chair and GSR must be two of these four.

Total Length: 2 hours and 30 minutes

General Examination Chair: A committee member other than the Thesis Committee Chair (PI) must chair the Exam.

Thesis Committee Chair (PI): The PI may not comment on the student's activities and performance in the lab. The PI cannot ask or answer questions during the exam.

Oral Examination Format

1. Student Introduction

The student's introduction should include:

- a. Academic and Research Background
 - i. Years and location of undergraduate training
 - ii. Degree(s) obtained
 - iii. Years and location of research experience
- b. Coursework
 - i. List of classes and number of credit hours taken to date
 - ii. Grades
 - iii. Number of credit hours remaining
- c. TA assignments completed
- d. Number of presentation slides and anticipated delivery time for both sections of presentation

2. Introduction and Summary of Area of Investigation (20 minutes or less)

This section corresponds to Section 1 and 2 of the Written Proposal: Abstract and Specific Aims.

A detailed discussion of experimental strategies and presentation of unpublished data will occur later. However, summaries of previously published experiments that are key to a general understanding of the research field, and general questions about such strategies, are allowed.

Note: Interruptions are not allowed during this 20-minute introduction. Questions may be asked only for general clarification.

3. Question and Answer Session: General (~30 minutes)

This session focuses on general principles and concepts in molecular and cellular biology, related to the area of biological study presented in the proposal. Questions about details of experimental methods should be avoided at this time. This portion is an opportunity to examine the quality of the student's knowledge and understanding of their general area of study. The Committee is encouraged to prepare questions that test the breadth of the student's knowledge in the broader areas of molecular and cellular biology that surround their thesis work.

4. Break (5 minutes)

5. Presentation of Research Strategy (20 minutes or less)

The Research Strategy presentation should include:

- a. A statement of the specific aims of the project, including a definition of the extent to which the work is discovery based vs. hypothesis based.
 - i. If the project is primarily discovery based (i.e., a genetic screen or a structure determination), some explanation of if and how the data generated by the project will lead to novel, revised or expanded understanding of the field and the problem is expected and appropriate.
- b. Proposed experiments, with a logical sequence and timeline.
- c. Justification and defense of the chosen experimental strategy relative to possible alternative methods.
- d. Description of any unusual, novel, or innovative experimental strategies or methodologies.
- e. Published and/or unpublished preliminary experiments that indicate feasibility, with interpretation of the resulting data as desired.
 - i. Preliminary data generated by the student is not a requirement for taking the general exam, nor for evaluation of a student's performance. However, the student is expected to describe a well-designed flow chart of experiments that progress from initial characterization and troubleshooting of the experimental system to well-controlled tests of experimental hypotheses and/or collection of data for long-term analyses. The student is free to describe any recent experiments by themselves or others that indicate feasibility.

Note: Interruptions are not allowed during this 20-minute introduction. Questions may be asked only for general clarification.

6. Question and Answer Session: Research Project (~60 minutes)

This session focuses on the student's understanding of experimental methodologies, and their ability to defend and rationalize the choice of experimental system, techniques and strategies. The questions should cover both published precedents and examples of similar studies, and interpretation of any available experimental results. Questions on general areas of biological understanding are still permitted at this time and for the remainder of the exam.

7. Supervisory Committee Discussion, Part 1

With the student and PI absent from the room, this discussion focuses evenly and comprehensively on strengths and deficiencies in understanding and knowledge of the research area and on the student's defense and rationalization of experimental strategies and goals.

8. Supervisory Committee Discussion, Part 2

The PI joins the Committee to continue discussion.

9. Supervisory Committee's Decision

The Supervisory Committee provides the student with an oral summary of the Committee's decision.

The committee can, at their discretion, require the student to be reexamined in the next quarter for any of the following reasons:

- a. Deficiencies in understanding and/or presentation of basic principles, core knowledge and/or biological context of the project within the boundaries of historical molecular and cellular biology.
- b. Deficiencies in rationale and/or defense of experimental strategies, including the ability to engage in a detailed critique of strengths and weaknesses of published and unpublished methods, including proposed thesis experiments.

Reexamination can include all elements of the exam, or just the part deemed deficient by the committee. The committee may also request resubmission of a revised written proposal if the proposal is deficient in quality - including clarity, logic, grammar, organization, or presentation. The Dean of the Graduate School will approve at most two reexaminations except under extraordinary circumstances.

Committee Signature Form

Signatures are gathered by the **General Exam Chair**. The following forms are acceptable signatures:

1. Handwritten signature
2. Adobe digital signatures

The Committee Signature Form is submitted to Maia Low by the student in either digital or hard copy format.