GRADUATE STUDENT HANDBOOK MOLECULAR AND DEVELOPMENTAL BIOLOGY GRADUATE PROGRAM UNIVERSITY OF CINCINNATI

Table of Contents

Table	of C	onto	ents	Page:
Table	9 01 0	JOHLE	3115	2
l.	Ар	plica	tion and Admission to Graduate Degree Programs	5
	A.	App	plication	5
		1.	Process	5
		2.	Requirements	6
		3.	Admissions and Financial Aid	6
			a. Admissions Decisions	6
			b. Financial Aid Decisions	7
	B.	Pre	-Registration Procedures and Requirements	7
		1.	Supplementary Information Form	7
		2.	Immunization Records	8
		3.	Transfer of Credits	8
II.	Do	ctora	al Degree Programs	9
	A.	Co	urse of Study	9
	B.	Cre	edit Hours	9
	C.	Mir	nimum Academic Standards and Procedures for the Evaluation of	f
			ident Progress	
	D.	Op	tions when Minimum Academic Standards are not met	10
	E.		sidency	
	F.	For	eign Language Requirement	11
	G.	Red	quirements for the Doctor of Philosophy Degree	11
		1.	Overview of Requirements	
		2.	Initial Start Date	
		3.	Lab Rotations and Selection of Advisor	
		4.	Advisor	
		5.	Doctoral Candidacy Committee (Qualifier Committee)	
		6.	Doctoral Candidacy Examination (Qualifying Examination)	
			a. The Doctoral Candidacy Examination Process	
			b. Timing of the Candidacy Examination	
			c. Retaking of the Candidacy Examination	
		7.	Dissertation Committee	
		8.	Submission of Dissertation	
			a. Traditional Thesis Format	
			b. Combination of Published and Supplemental Material	
		9.	Final Defense of Dissertation	
		10.	Time Limitations	
		11.	Exit Survey	19
III.	Pro		m Requirements	
	A.		aduate Course Requirements	
	B.	_	ggested Course Schedule	
		1.	Overview	20

		2. Molecular & Developmental Biology Journal Club	
		3. Lab Rotations	
		4. Graduate Student Symposium	. 21
		5. Cincinnati Children's Research Foundation Seminar Series	
	C.	Requirements for the PhD degree in the Molecular and Developmental	
		Biology Graduate Program for students in the MSTP combined MD/PhD	
		Program	22
	D.		
	υ.	Stipend Support	
		Tuition Support	
		Overview of Requirements	
		Advisor	
		5. Dissertation Committee	
	_	6. Time Limitations	
	E.	Overview of Program Requirements Timeline	. 24
	_		
IV.		aduate Credits and Grading Practices	
		Course Load	
	В.	Scholarships	
	C.	Grading Practices	. 25
V.	Do	gistrationg	26
v.			
		Adding and Dropping Classes	
	Б.	Withdrawing from Classes	
		Academic Considerations Figure size Considerations	
	_	2. Financial Considerations	
		Audit Regulations	
	D.	Student Status Options	
		1. Full-Time Student Status	
		2. Part-Time Student Status	. 28
VI.	ΔА	ministration of Program	. 29
V 1.		Role of Director of Program	_
	л. В.	Role of Co-Director of Program	
	C.	Role of Associate Director for Graduate Studies	
	D.	Role of Associate Director for Admissions	
	E.	Role of Associate Director for Curriculum	
	F.	Role of Ad-Hoc Members	
	G.	Appointment of Officers	
	Ы. Н.	Grievance Committee	
	l.	Role of Program Coordinator	
	J.	Graduate Student Officers	
		1. Admissions Representatives	
		2. Student Representatives	
		3. Seminar Coordinators	
		4. HSGA Representative	
		5. Student Meeting Coordinator	. 32

	6. Social Coordinators	32
	7. Website Coordinator	33
	K. Overview of Program Administration	33
VII.	Special Rules and Provisions	34
	A. Eligibility of University Faculty and Administrators for Graduate Degrees.	
	B. Non-Discrimination Policy	
	C. Right to Review Records	34
	D. Grievance Procedures	34
	E. Academic Dishonesty	35
	F. Sexual Harassment	36
	H. Maternity/Paternity Leave Policy	36
VIII.	Faculty Membership Guidelines	37
	A. Goals	37
	B. Nomination and acceptance procedures for New Training Faculty	37
	C. Reappointment of Current Training Faculty	38
Appe	ndix A	40
	Lab Rotation Chart	
	Faculty Lab Rotation Evaluation	42
	Student Lab Rotation Evaluation	43
	Lab Declaration Form	44
	Pre-Qualifier Form	45
	Qualifier Committee Form	46
	Department Permission for Admission to Candidacy	
	Annual Dissertation Committee Meeting Form	48
	Application for Thesis Defense	
Appe	ndix B	
	Pre-Qualifier Student Guide	
	Pre-Qualifier Chair Guide	
	Pro Qualifier Committee Guide	57

I. APPLICATION AND ADMISSION TO GRADUATE DEGREE PROGRAMS

A. Application

1. Process

Completion of the UC Graduate School Online Application is required. Apply online at: www.grad.uc.edu/ApplyOnline.aspx. Payment of the \$65.00 application fee (for domestic students; \$70.00 application fee for international students) is required in order to submit your application. For further instructions, please see the application instructions on the Graduate School website: http://www.grad.uc.edu/admissions.aspx.

No hard copies of the personal background statement will be accepted. The personal background statement (addressing the applicant's academic background, research experience, motivation to do a PhD, and career goals) must be submitted electronically with their application. When this is done, the program will receive an email notification that someone has applied and that his or her personal background statement has been submitted.

The UC Graduate School Online Application requires three (3) Letters of Recommendation from people qualified to assess the applicant's ability to succeed in a research-intensive graduate program. The MDB program requires a minimum of three letters, but will accept a fourth letter. The online application will direct applicants to submit names and contact information for their recommenders. Listed recommenders will receive an email with instructions for submitting letters approximately 1-2 days after the student submits an online application.

Official transcripts from every undergraduate and graduate institution attended should be sent directly from the issuing institution to the MDB Program as soon as possible. GRE scores and/or transcripts supplied by the applicant are not acceptable for formal application to the program. Transcripts are the ONLY documents that should be sent directly to the MDB program.

After preliminary screening of applications, selected applicants may be scheduled for a personal interview. The interview serves as an opportunity for the applicant to meet faculty and graduate students, and to see the program's research facilities and for members of the Program to evaluate the applicant. The program will pay for all reasonable travel expenses incurred during the interview process, in accordance with Cincinnati Children's Hospital Medical Center (CCHMC) Travel Policies.

Applications and all supporting documents are accepted between August 1 and March 1 of each academic year for admission in the fall of the following academic year. For early consideration, applications should be received by February 1.

2. Requirements

The prospective student is expected to have a strong undergraduate background in biology. Some background in chemistry, physics and mathematics is also preferred. All applicants are expected to take the general test of the Graduate Record Exam (GRE), administered by the Educational Testing Service, Princeton, New Jersey, 08540. The student must send GRE Scores to the University of Cincinnati (institution code 1833) at the time of exam. Advanced subject tests are accepted, but not required. All applicants are required by the Graduate School to have obtained a baccalaureate degree, or its equivalent before entering the graduate program.

3. Admissions and Financial Aid

a. Admission Decisions

The program's Admissions Committee, in consultation with the Program Directors, makes all decisions concerning admissions to our graduate program. The committee has the authority to set application deadlines, require certain pre-admission examinations, require satisfactory completion of certain course work prior to admission, and to establish other pre-admission requirements. Admission decisions must not be made on the basis of race, age, sex, color, religion, sexual orientation, or handicap except in those disciplines in which handicap will place the student, other students, faculty or staff in physical danger (Affirmative Action Guidelines). Decisions to admit or not to admit are final unless it can be demonstrated that the Admissions Committee violated a MDB Program policy or failed to apply fairly and consistently the criteria established by the program.

No international student will be granted admission on any basis other than full graduate standing. For admission to full graduate standing at the University of Cincinnati, a student must have a baccalaureate degree from a college or university regarded as standard by a regional or general accrediting agency. The applicant should have at least a "B" grade average in relevant undergraduate course work, or otherwise give evidence of promise satisfactory to the program. Admission will be made at the discretion of the program.

In instances where an international student holds a degree for which the U.S. equivalent is not known or if it is determined by the department and/or the International Student Services Office that the applicant does not have the equivalent of a bachelor's degree, the program must submit a petition for admission without a bachelor's degree to the Graduate Council and provide any supporting documentation deemed pertinent. Before their admission to the university is completed, all international students must fulfill

U.S. Immigration Service requirements and register with the International Student Services Office at the University of Cincinnati.

The Test of English as a Foreign Language (TOEFL) is required of all applicants whose native language is not English. The test must be taken before admission is granted and test scores are only good for two years. This requirement may be waived for international students who have a degree from an accredited American college or university and who have studied oral and written English while a student in the American college or university, as defined by the International Student Services Office (ISSO) of the University of Cincinnati. Presently, the minimum UC Graduate School TOEFL score for graduate work is 520 (paper), 190 (computer) and 68 (internet).

Upon arrival at the University of Cincinnati, all international students are required to carry student health insurance. Insurance fees (reflecting the number of accompanying dependents) will be assessed at each registration period.

b. Financial Aid Decisions

All students in good academic standing in the Ph.D. track of the Molecular and Developmental Biology Graduate Program will be eligible for tuition scholarship (University Graduate Scholarship, UGS) through the official candidacy period as granted by the University of Cincinnati (4 years postcandidacy). Student fees will also be provided for these students, depending on the availability of funds. Students in the Master's track will be eligible for tuition scholarship and support for student fees for one year after entry into the Master's track, subject to availability of funds. Likewise, graduate assistantship (UGA) stipend support will be provided to all students in the program, based on performance and availability of funds. Student Health Insurance premiums will also be covered by the program during the first year and the Advisor thereafter. Under ordinary circumstances, assistantships and tuition scholarships will not be awarded to students who have accumulated 174 or more graduate credit hours. Students are expected to devote full-time to their academic and research training. No service related functions (e.g. teaching and lab assistantships) are required of Ph.D. students in the Molecular and Developmental Biology Graduate Program.

B. Pre-Registration Procedures and Requirements

1. Supplementary Information Form (UC Graduate School Requirement)

The following individuals must complete the Supplementary Information Form prior to registration:

a. New students entering the University

- b. Students not enrolled in the previous academic year
- c. Students who transfer from another college
- d. Students who have earned a Master's degree and are admitted to a Ph.D. program.

2. Immunization Records

A copy of each student's immunization records will be required at the time of acceptance into the program. These records will be released to Employee Health at CCHMC for review. If additional immunizations are needed prior to CCHMC badging the student must obtain the required immunizations and provide documentation prior to their start date. Failure to fulfill this requirement and any others mandated by Cincinnati Children's Hospital Medical Center may result in the student's expulsion from the program.

3. Transfer of Credits

Limits are set on the amount of work completed at other institutions which can be included as fulfilling graduate degree requirements. The Associate Director for Graduate Studies will determine which credits are transferrable.

II. DOCTORAL DEGREE PROGRAMS

A. Course of Study

The course of study to be pursued for the doctoral degree will be arranged with each student by the Associate Director for Graduate Studies and their Advisor with advice, as needed, from the Program Directors. Course work in other programs may be scheduled according to the needs of the individual student. In all cases, the aim of the doctoral program will be to develop competence in research, scholarship, teaching, and professional performance in general, and a knowledge of the specialty in relation to allied branches of learning.

B. Credit Hours

The University of Cincinnati defines the minimum requirement for the doctoral degree in the Graduate Student Handbook. In general, a student must earn a minimum of 90 graduate credits beyond a bachelor's degree or a minimum of 60 credits beyond a master's degree, including at least 7 hours of research, to be eligible for a doctoral degree. The last 30 credits, in either situation, must be earned from the University of Cincinnati and cannot be transfer credits.

- C. Minimum Academic Standards and Procedures for the Evaluation of Student Progress
 - 1. Students in the Molecular and Developmental Biology Program are required to maintain a minimum of a B (3.0) average in both their didactic and research courses.
 - 2. Students obtaining a C+ or below in any didactic course are automatically placed on academic probation during the semester following receipt of the grade of C+ or below. Students who obtain a D or F will be required to retake the course for credit and earn a B or better. Obtaining two grades of C+ or below in any one semester is cause for immediate dismissal from the program.
 - 3. Failure to find a lab placement and Advisor no later than June 30 of the first year is grounds for dismissal at the discretion of the Executive Committee.
 - 4. Determination of normal progress in the Program is defined as:
 - a. Obtaining a grade of at least a B- or Pass (in courses where Pass/Fail is the grading mechanism) in all didactic and research courses required by the Molecular and Developmental Biology Program;
 - b. Completion of a total of 60 graduate credit hours for the master's degree and 90 graduate credit hours for the doctoral degree within the specified time stipulated by the rules of the Graduate School of the University of Cincinnati;

- c. Completion of at least two lab rotations or approval of an exception from the Associate Director for Graduate Studies;
- d. Attendance and participation at the annual Graduate Student Symposium;
- e. Establishment of a Qualifier Committee (Candidacy Committee) by April 1 of the second year;
- f. Convening a meeting of their Qualifier Committee to discuss the acceptability of their Preliminary Proposal by April 1 of their second year in the program;
- g. Minimum of one Dissertation Committee meeting per year following successful completion of the Qualifying Exam;
- h. Submission and oral defense of a satisfactory doctoral dissertation or its equivalent within four years of candidacy (the time limit specified as required by the graduate school).
- 5. A written assessment of performance for each student is provided at the end of each academic year. These Milestone Reports must be reviewed and signed by the student, their Advisor and the Associate Director for Graduate Studies. Milestone Reports are then filed as part of a student's permanent academic record.

D. Options when Minimum Academic Standards are not met

- 1. Any student who fails to meet any or all of the Minimum Academic Standards as set forth by either the Program or the University of Cincinnati Graduate School will be placed on academic probation. The student will be notified of his/her status with a letter from the Associate Director for Graduate Studies, which will outline the offense and clearly state the terms of probation. Academic probation will last for one semester and the official notice of academic probation becomes part of the student's permanent academic record. No student who is currently on academic probation can be nominated for any awards. Past instances of academic probation will be a consideration in the nomination and presentation for all awards.
- 2. If a student is placed on academic probation for a second time, one of two courses of action will be followed, at the discretion of the Executive Committee:
 - a. Dismissal from the program.
 - b. A student may be given the option to withdraw from the program. This allows the student to prevent a dismissal action from appearing on their academic transcript.
- 3. Process for Appeal: If the student believes there are extenuating circumstances that indicate why his/her performance has not met the minimum requirements of the program, he/she may submit a written petition to the Associate Director for Graduate Studies explaining these circumstances. These will then be presented to the Executive Committee whereupon the Executive Committee

will either vote to accept or reject the petition. A vote to reject the petition constitutes a vote for dismissal from the program.

E. Residency

All doctoral students must remain enrolled for at least ten graduate credits per semester for four out of five consecutive semesters, including the summer semester, so long as they register for each autumn semester involved.

All graduate students must apply for state residency after residing in Ohio for one year.

F. Foreign Language Requirement

There is no foreign language competency requirement for the program.

G. Requirements for the Doctor of Philosophy Degree

1. Overview of Requirements

- Satisfy all requirements outlined in Section IIC above, and any additional requirements specified in the Graduate Handbook of the University of Cincinnati;
- b. Produce and publically defend a dissertation showing high scholarly achievement based on the student's original research. The student is expected to submit an electronic document as evidence of this research;
- c. The student must provide a completed copy of his/her dissertation to every member of the Dissertation Committee at least two weeks before the date of the public defense of the dissertation;
- d. Public notification of the defense of the dissertation should be made via the online Graduation Application two weeks before actual defense takes place, per Graduate School requirements;
- e. Removal or waiver of all I, NG, UP/SP grades and confirmation of satisfactory repetition or waiver of required course in which an F was originally received, in compliance with Graduate School requirements;
- f. Activities required for graduation.
 - 1) Download the Graduation Checklist from the DB Student homepage on CenterLink.
 - 2) Complete the Application for Thesis Defense and return to the Program Coordinator, with all required signatures.

- 3) Complete the official online Application to Graduate and pay the application fee required by the Graduate School by the deadline for the semester in which the student expects to graduate. Per Graduate School policy, deadlines are firm and failure to meet them will delay graduation until the following semester, when they must submit a new application for their revised graduation date.
- 4) Announce your defense with the Graduate School and notify the Program Coordinator of your defense details for CCHMC announcements.
- 5) Create your committee approval form to be signed at defense.
- 6) Submit your Electronic Thesis Dissertation (ETD) for Advisor approval. Once your Advisor has approved your thesis it will automatically be submitted to the Graduate School.
- 7) Check your graduation status online.

2. Initial Start Date

All incoming students will be required to start on July 1st unless there are extenuating circumstances approved by the Program Director.

Lab Rotations and Selection of Advisor.

It is highly recommended that lab rotations be no less than 6 weeks in length. A minimum of two laboratory rotations is required unless the Associate Director for Graduate Studies approves an exception.

4. Advisor

The Advisor directs the research that will constitute the M.S. thesis or Ph.D. dissertation. The Advisor shall be a member of the Molecular and Developmental Biology Program and the choice shall be mutually acceptable to student and faculty member. The Advisor serves as chairperson of the Dissertation Committee.

5. Doctoral Candidacy Committee (Qualifier Committee)

A candidacy committee is to be invited by the student, in consultation with their Advisor, prior to the Doctoral Candidacy Exam. For doctoral students, the committee consists of at least 3 faculty members of Molecular and Developmental Biology Program and should include at least one member from another program (or from another University or appropriate organization) for a total of 4 members; it is permissible to appoint more than 4 members. The

Advisor may be present during the exam, but will not sit on the committee. Duties of the candidacy committee are to help guide the student during the candidacy examination process (See Appendix B). Proctoring of the Doctoral Candidacy Exam is the primary responsibility of this Committee. The number of Candidacy and/or Dissertation Committees that a faculty member may be on cannot exceed 8 (excluding those in which the faculty member is the Advisor).

6. Doctoral Candidacy Examination (Qualifying Examination)

a. The Doctoral Candidacy Examination Process

The Doctoral Candidacy Examination is a requirement of the University of Cincinnati. It represents one of the most careful evaluations of students' intellectual development and capability by the University and the Program. This section contains the rules by which the examination will be conducted by the Molecular and Developmental Biology Graduate Program and also guidelines to be used by students and faculty in preparing for the doctoral candidacy examination. To fulfill the basic requirement of the Candidacy Examination a student must formulate a research proposal in some aspect of Molecular and Developmental Biology, using the format of an NIH grant application. The subject of the research proposal can be the same as the topic of the student's dissertation, a related topic, or a different topic. The Doctoral Candidacy Committee will administer the candidacy examination.

It is important for both the student and their Advisor to understand that the candidacy exam must represent the **independent intellectual effort** of the candidate. For this reason, if the subject chosen by the candidate relates to work in the Advisor's lab (including the candidate's dissertation research), then both candidate and Advisor must sign a statement that the proposal represents the candidate's independent intellectual effort. If the candidate chooses to submit a research proposal based on his/her thesis project, it is recognized that the overall research direction will likely be a collaborative effort between student and Advisor. The details of the proposal including background and experimental design should however be formulated and written by the student. Inclusion of material from previously published work without the appropriate attribution will result in sanctions, at the discretion of the examining committee and in accordance with University Policy and the Student Code of Conduct. Options include, but are not limited to:

- 1) Reporting to the University of Cincinnati
- 2) Rewriting the candidacy exam
- 3) Permitting withdrawal from the University of Cincinnati
- 4) Dismissal from the University of Cincinnati

There are three stages to the candidacy examination:

Stage 1: Preliminary Proposal: A 2-3 page typed summary briefly outlining the proposal is to be submitted to the Candidacy Committee. This preliminary proposal contains a hypothesis and related experiments testing the hypothesis

that represent the independent intellectual effort of the student. This proposal will contain a brief background for the study, the hypothesis, and a set of experiments or specific aims to test the hypothesis. Technical detail should not be included at this stage. It is expected that students will require only a few weeks to prepare the preliminary proposal. The preliminary proposal will be judged acceptable/not acceptable in an initial meeting of the Candidacy Committee. A chair of the committee (other than the student's Advisor) will be elected at the first meeting or nominated by the student and approved by the committee. At the first meeting a date will be set for the exam (within 7 weeks); the student should obtain the necessary form (Pre-Qualifier Committee Form) from the Program Coordinator or the DB Student Homepage on CenterLink prior to their first meeting. This form should be completed and returned, with all necessary signatures, to the Program Coordinator, as soon as possible following the meeting. If the Candidacy Exam is not taken within 7 weeks (with some allowance by the committee chair for the members' schedules) from this initial meeting the student will be considered to have failed the exam and will not be able to retake it until the next semester.

Stage 2: Final Proposal: If the preliminary proposal is acceptable to the Candidacy Committee, not more than 6 weeks later the full proposal is to be submitted. NIH R01 The final proposal is to be in (http://grants.nih.gov/grants/funding/424/index.htm) and should include an abstract, specific aims, significance and innovation, and research plan sections. As guidelines, the specific aims should be one page in length and the entire proposal not more than 12 single spaced pages (excluding references). Shorter proposals are acceptable. During the interval between submission of the final proposal and examination, the student and his/her Advisor should discuss how a budget is developed. As the final proposal represents substantial effort, it is anticipated that most of the student's time during this period will be devoted to its preparation. Furthermore, as the final proposal is the intellectual invention of the student, it is expected that no assistance in its preparation will be solicited and that other students, faculty, or any other individual will offer none. Two exceptions to the rule that the final proposal will be prepared independently are noted here: (1) As students at this stage of their career may not be familiar with some of the technical methodologies they propose to use, they may seek guidance on technical matters. The student's Advisor or his/her designee will give such guidance. The Advisor will determine which are technical and which are conceptual matters and may decline to offer advice accordingly. (2) Some students may require assistance with grammar and construction of written documents. The advisor or his/her designee will also give this assistance.

Stage 3: Oral Examination: Approximately one week after submission of the final proposal, an oral examination is to be conducted by the Candidacy Committee. Typically this exam will begin with a 20-30 minute summary of the proposal by the student followed by questioning on all aspects of the proposal by the Committee. As a portion of the examination, students can be

questioned on any aspect of molecular and developmental biology as well. The student's Advisor will be present during the examination but will remain silent during the proposal's defense. At the end of the defense both the Advisor and student will leave the room while the committee deliberates.

Performance on the exam is determined by a vote of the examiners. A pass will require the vote of the majority of the committee. Both the student and the Advisor will return after the vote to be informed of the decision by the committee chair. The chair will discuss the strengths and weaknesses of the written proposal and oral defense of the proposal as well as any other suggestions or requirements of the student with both the student and the Advisor. In addition, the chair will prepare copies of a short written report of the student's performance for the student, Advisor, and the student's file. A candidacy exam report form must be filled out and signed by all members of the committee. It is to be returned immediately to the Program Coordinator and copies sent to the student and Advisor.

Possible outcomes of the examination include:

- (1) Pass without stipulations.
- (2) Pass with the stipulation of completion of additional requirements. For example a student may be required to rewrite the proposal if the English composition is not satisfactory. A course in public speaking may be required. Academic work to remedy a deficit revealed by the examining process may be required. The committee may mandate other requirements, as it deems appropriate.
- (3) Fail.

A failing performance may be reversed by the completion of additional requirements set by the committee which can include but is not limited to complete formulation and defense of a new independent proposal. Lesser requirements may be set as necessary. Requirements for retaking the proposal are governed by University policies (see c, below). Should the student fail to pass the examination on the second attempt, they will be dismissed from the program.

Guides for the Committee Chair, Committee Members and Student can all be found in the appendices to this handbook.

b. Timing of the Candidacy Examination

Students are required to convene a meeting of their Candidacy Committee to discuss the acceptability of their Preliminary Proposal by April 1 of their second year in the program. The Preliminary Proposal must be submitted to the committee at least one week prior to this meeting without intervening revisions. The Final Proposal must be submitted to the committee at least one week prior to the examination (i.e., six weeks to write the proposal + one week for the committee to read it, for a total of seven weeks from preliminary

proposal approval to date of the examination). Students failing to meet these deadlines are subject to sanctions. Students seeking exemption from the Preliminary Proposal deadline must have prior approval or risk sanctions. Once the Preliminary Proposal is approved, the seven week limit applies from the final date of committee approval.

Candidacy for the doctorate automatically terminates after four consecutive calendar years. Candidates may petition the Graduate Council through the Program, College of Medicine and the University Dean for extension of candidacy prior to its expiration or for reinstatement if candidacy has expired. If reinstatement is approved, the Program will readmit the student to candidacy only after satisfying the formal candidacy examination requirements. Petitions shall be submitted on the approved form. The doctoral degree will be granted for no less than the equivalent of three years of full-time graduate study and must be completed within nine calendar years of initial matriculation.

c. Retaking of the Candidacy Examination

No second examination for candidacy should be held until at least a semester has elapsed, however, the process must be initiated (i.e. preliminary meeting held) within 6 months. Under normal circumstances, the student must keep the same committee members for the second examination unless approved by the Associate Director for Graduate Studies. Should the student fail to pass the examination on the second attempt, they will be dismissed from the program and precluded from entering the Master's track.

7. Dissertation Committee

The Dissertation Committee will be formed upon satisfactory completion of the Doctoral Candidacy Examination. The composition of the Dissertation Committee may be changed at this time, but must include the student's Advisor (Chairperson), at least two faculty members in the Molecular and Developmental Biology Program and at least two additional faculty members (at least one of whom should be from another program or from another university or appropriate organization).

The Dissertation Committee will monitor the program of dissertation research on a continuing basis. Committee meetings with the student should occur at least once a year, or more often at the discretion of the Dissertation Committee, and will be documented by completion of an evaluation form by the Advisor to be kept in the student's file. Review of the written dissertation and the oral defense of the dissertation will be proctored by this committee.

8. Submission of Dissertation

The student must have at least one first author paper published, in press or accepted in a peer-reviewed journal to be eligible to begin writing the dissertation. The paper(s) must represent, in the view of the student's Dissertation Committee, significant contributions to the scientific literature. Publications that do not meet the minimum requirement include abstracts, brief notes, preliminary communications, book chapters, review articles and papers under review for publication. The Executive Committee will consider exceptions to this requirement on a case-by-case basis. The student will have the option of writing the dissertation in either a traditional thesis format or as a combination of published and supplementary material as described below.

a. Traditional Thesis Format:

Introduction - presents the research problem, the background, which critically evaluates existing knowledge and specifically identifies gaps that the research has attempted to fill.

Materials and Methods - complete description of materials and methods employed in carrying out the research

Results - presentation of most or all of the relevant graduate research incorporating necessary tables, illustrations and photographs, and diagrams

Discussion - discussion of results, conclusions drawn, relevance to existing knowledge, difficulties of interpretation of particular data

Bibliography - listing of all cited literature references, including all authors, titles, dates, volume and inclusive pages

Appendix - additional materials including tables or figures, if desired

b. Combination of Published and Supplementary Material:

This mechanism would allow the inclusion of material previously published by the student in the dissertation without substantial rewriting. The completed dissertation would then consist of reproductions of work published or in press and also any additional methods, results, and/or discussion deemed necessary by the student's Advisor and committee.

In most cases, the published work will constitute separate chapters preceded by a General Introduction and followed by a General Discussion. Chapters containing unpublished data should be written in the format of a scientific paper.

The creation of two mechanisms to satisfy the Program's requirement for a written dissertation does not change the requirement of a satisfactory oral defense of the dissertation or any other requirement of the Program.

9. Final Defense of Dissertation

The student's final defense of his/her dissertation will be open to the public and all members of the academic community. Following an oral presentation of the dissertation the general audience is free to ask questions and make comments. After the audience leaves the room, members of the Dissertation Committee will ask pertinent questions of the candidate. At the conclusion of the defense, the student will withdraw, and the Dissertation Committee will make a decision with regard to the acceptability of the dissertation and its defense, and report to the candidate. If the decision is favorable, the approval form will be signed by the committee members and should be scanned and uploaded by the student into the Electronic Thesis Dissertation (ETD) system. At least 4/5 of the voting members of the dissertation committee must approve the dissertation.

10. Time Limitations

The doctoral degree will be granted for no less than the equivalent of three years of full-time graduate study. All requirements for the doctoral degree must be completed within nine (9) consecutive years of initial enrollment. This period includes a maximum of four (4) years beyond candidacy. A period of seven (7) months must elapse between admission to doctoral candidacy and receipt of the degree.

The Graduate School automatically expels students from candidacy when failing to complete their doctoral degree requirements by the time limit on candidacy (4 years); students may petition the Graduate School for reinstatement or extension of candidacy at their discretion after requesting a letter support from the Program. An official University extension/reinstatement petition form must be filed with the Graduate Division and must include a letter of support from the program in order to be considered by the Graduate Council of the University. To obtain a letter of support, the student and his/her Advisor must write a letter explaining why the additional time is required, provide a plan for the completion of the dissertation, and suggest a date for termination of the extension. This letter should be circulated to the student's dissertation committee and sent to the Associate Director for Graduate Studies. The Associate Director for Graduate Studies will prepare a letter in support of the petition if they are in agreement. However, extension of stipend support is at the discretion of the Advisor and UGS support is at the discretion of the program. The program will not provide stipend support during extensions.

11. Exit Survey

The Office of Graduate Research and Assessment, at its discretion, will conduct an exit survey on the doctoral experience of all graduating doctoral students. The results will be shared with the doctoral programs. In most

cases, the student will be asked to complete this survey upon applying for graduation.

III. PROGRAM REQUIREMENTS

A. Graduate Course Requirements

- 1. Students complete approximately 90 credit hours, of which 30 credit hours must be graduate-level coursework. Students choose the appropriate coursework and timetable according to their backgrounds and interests, in consultation with the Associate Director for Graduate Studies and their Advisor.
- 2. Students are required to participate in Journal Clubs (Fall & Spring Semester during first and second years; Spring in subsequent years of study) and attend weekly Seminars sponsored by the Division of Developmental Biology and the Perinatal Institute.
- 3. Students are required to take the Ethics in Research course in the spring semester of their first year.
- 4. Students are expected to register and complete classes in a timely fashion. Dropping classes, after the first three lectures, will not be permitted except in cases of personal emergency as determined by the program.

B. Suggested Course Schedule

1. Overview

Courses in Developmental Biology, Molecular Genetics and Cell Biology; students choose the appropriate coursework according to their backgrounds and interests, in consultation with, and under the approval of, the Associate Director for Graduate Studies. Please note that Ethics in Research (GNTD7003) is required for all students and should be taken in the spring semester of the first year.

In the second and third years, students complete their course requirements by choosing further electives. For more information on elective courses recognized by the MDB Program please see the Program Coordinator. In addition to electives, Development and Disease (DB9087) is required in either the 2nd or 3rd year. Please note that this course is offered only every other year in the Spring Semester.

In Years 3-5 the central focus is the research project, as well as attendance at journal club (1 semester per year), weekly Seminar and the annual Graduate Student Symposium.

An example of the courses chosen by a typical first year MDB student:

Fall Semester	Spring Semester			
Developmental Biology Seminar	Developmental Biology Seminar			
DB 9001 (1 hr.)	DB 9002 (1 hr.)			
Journal Club	Journal Club			
DB 9004 (1 hr.)	DB 9005 (1 hr.)			
Developmental Biology Laboratory Research	Developmental Biology Laboratory Research			
DB 9073 (10 hrs.)	DB 9073 (9 hrs.)			
Introduction to Developmental Biology	Advanced Developmental Biology			
DB 9085C (3 hrs.)	DB 9086C (3 hrs.)			
Molecular & Cellular Biology	Gene Regulation			
GNTD 7001 (3 hrs.)	MG 8001 (3 hrs.)			
OR Biochemistry & Cell Signaling GNTD 7002 (3 hrs.)	Ethics in Research GNTD 7003 (1 hr.)			

2. Molecular and Developmental Biology Journal Club

Responsibility for organizing Journal Club resides with the Graduate Student Representatives. During fall semester, Journal Club is to be led by a faculty member in the Graduate Program in Molecular and Developmental Biology and during spring semester by graduate students. The Graduate Student Representatives will indicate to the Associate Director for Graduate Studies whether students satisfactorily participated in the student led Journal Club. Attendance is mandatory for all first and second year students. Participation in Journal Club for advanced students (3rd year and beyond) is required only during the spring semester when they are expected to provide leadership for the group. An advanced student is exempt from attendance and participation in Journal Club only in the semester during which he/she defends their thesis.

3. Lab Rotations

Three laboratory rotations of a minimum of 6 weeks each are recommended; a minimum of two rotations is required. Students must complete one of the required laboratory rotations during the summer prior to fall semester of their first year. A faculty member who takes a student into a lab rotation is expected to give the student adequate time and supervision. The first laboratory rotation must begin within one week of program orientation in the July prior to the fall semester of their first year.

4. Graduate Student Symposium

All students in their third year or beyond present their work at the annual MDB Student Symposium. Presentations take the form of oral presentations or posters. Second year students have the option to present a poster of their preliminary studies. Students who are defending their thesis in the fall semester are not required to present at Symposium but should plan to attend.

5. Cincinnati Children's Research Foundation Seminar Series

All students are required to participate in the weekly seminar series sponsored by the Division of Developmental Biology and the Perinatal Institute. The Program Coordinator will sit on the Seminar Committee, which is appointed by the Director of the Division of Developmental Biology. The Program Coordinator is responsible for organizing the weekly series and will record student attendance each week. The Associate Director for Graduate Studies will issue grades for seminar participation.

- C. Requirements for the Ph.D. degree in the Molecular and Developmental Biology Graduate Program for students in the MSTP combined M.D./Ph.D. program
 - MSTP students will enter the program as second-year students for the purposes of Journal Club and Student Symposium requirements. However, all Developmental Biology courses MUST be taken within one year of entering the program. This includes Introduction to Developmental Biology (DB9085C), Advanced Developmental Biology (DB9086C), Development & Disease (DB9087) and Gene Regulation (MG8001).
 - 2. MSTP students must successfully complete their first year in the MDB program prior to beginning their candidacy exam.
 - 3. Withdrawal/dismissal from the MSTP program will result in an automatic dismissal from the MDB PhD program.
 - 4. All other requirements will be the same as for the Doctor of Philosophy Degree.

D. Requirements for the Master's Degree

The Master's Degree will only be granted when a student has been transferred to the Master's Track in consultation with their Advisor, the Associate Director for Graduate Studies and the Executive Committee. A student may request a transfer to the Master's Track by submitting a letter to the Associate Director for Graduate Studies, after having conferred with their Advisor and only if they are in good academic standing. If the program approves the transfer, the student will be allowed to complete the Master's degree requirements and graduate (terminal M.S.) with the following requirements:

1. Stipend Support

The student must identify an Advisor who is willing to mentor them in research for a terminal Master's degree in his/her laboratory. That Advisor will be responsible for the student's stipend after the end of the student's first year in the program.

2. Tuition Support

MDB Master's students will be eligible for a tuition scholarship for one year after transferring to the Master's track. The student will be responsible for payment of all relevant tuition and fees required by the University one year after entering the Master's track.

3. Overview of Requirements

- a. Establish a Dissertation Committee consisting of at least three members: the Advisor and at least two other members of the Molecular and Developmental Biology faculty.
- b. Completion, similar to the Doctoral Thesis, of a research project that is written and/or published in a peer reviewed journal and defended orally before the committee. Master's students are not required to publish prior to writing their thesis, as is a doctoral student. A master's thesis is similar to the doctoral dissertation except that the research and written description thereof are generally not as extensive. However, style, submission deadlines, and other details should adhere to the dissertation guidelines of the program.
- c. Satisfactory completion of all Molecular and Developmental Biology requirements.
- d. Completion of 30 graduate credit hours.
- e. Follow the graduation activities guidelines outlined for PhD students.
- f. Submit a thesis based on an experimental research project. Under certain unusual circumstances, an alternative to the research project may be substituted.
- g. A satisfactory oral defense of the thesis.
- h. Approval of thesis by the committee (form).
- i. All NG, IP and I grades must be removed.

4. Advisor

The role of the Advisor is described in Section H.5.

5. Dissertation Committee

The composition of the Master's Thesis Committee must include the student's Advisor (Chairperson), at least two additional faculty members in the Molecular and Developmental Biology Program and may include additional members from within or outside the program as needed. The Master's Thesis Committee will monitor the progress of the student. The committee will meet at least once a year and this will be documented by completion of an evaluation form by the Advisor to be kept in the student's file. Review of the written thesis and the oral defense of the thesis will be proctored by this Committee.

6. Time Limitations

The minimum requirement for the master's degree is the equivalent of one academic year of full-time graduate study, consisting of at least 30 graduate credits and research thesis completed to the satisfaction of the candidate's Master's Thesis Committee. The student whose undergraduate training has been insufficient should expect to spend more than one year fulfilling the requirements for the degree. A student pursuing a program leading to a master's degree must complete all requirements no later than seven (7) years from the date of first registration in that degree program. Under extenuating circumstances, students may petition the Graduate Council, through their program and college, for extension of the time limit. Petitions shall be submitted on the approved form.

E. Overview of Program Requirements Timeline

	July	August	September	October	November	December	January	February	March	April	May	June
	Lab Rotation I		Lab Rotation II			Lab Rotation IV				Lab Declaration		
Year 1	Program Orientation	MDB Student Symposium (no presentation)	Fall Semester Coursework			Spring Semester Coursework				Milestone Report		
Year 2	Begin/Continue work in selected lab		Fall Semester Journal Club & Fall Semester Seminar				Spring Semester Journal Club, Spring Semester Seminar & Development and Disease (offered in alternate years)				Milestone Report	
							Establish Qual	ifier Committee	Initial Qualifier Committee Meeting	Qualifyi	ng Exam	Пероп
Year 3	Begin/Continue work on thesis project	MDB Student Symposium (required oral presentation)	Fall Semester Seminar			Spring Semester Journal Club, Spring Semester Seminar & Development and Disease (offered in alternate years)				Milestone Report		
						Annual Committee Meeting						
Year 4	Continue work on thesis project	MDB Student Symposium (required poster	Fall Semester Seminar			Spring Semester Journal Club & Spring Semester Seminar				Milestone Report		
		presentation)					Annual Committee Meeting					1
												•
Year 5	Continue work Symposiur on thesis project (required or presentatio		Fall Semester Seminar			Spring Semester Journal Club & Spring Semester Seminar					Milestone Report	
		presentation				Annual Committee Meeting						
Years 6+	Continue work on thesis project	-,,	ium Fall Semester Seminar			Spring Semester Journal Club & Spring Semester Seminar				Milestone Report		
						Annual Committee Meeting						

IV. GRADUATE CREDITS AND GRADING PRACTICES

A. Course Load

- 1. Students will register for at least 12 credits (for full-time student status) for Fall and Spring Semesters exclusive of audit credits, unless otherwise directed by the Program Director.
- 2. Except in unusual circumstances, no outside work is permitted for students. Exceptions require written permission of the program.

B. Scholarships

Students receiving University Graduate Assistantships (UGA) or University Graduate Scholarships (UGS) must carry a full-time course load (12 credits or more) each semester exclusive of audit credits. Under ordinary circumstances, assistantships and tuition scholarships will not be awarded to students who have accumulated 174 or more graduate credit hours. Students will be eligible for tuition scholarships and graduate assistantships based on performance and availability of funds for up to 9 years post-matriculation. UGA and UGS will be awarded based on continued compliance with all University guidelines as outlined in the University of Cincinnati Graduate Student Handbook.

C. Grading Practices

Students may view grade reports online immediately following submission of final grades by the instructor. Grade reports include total graduate hours and hours for the current semester. Credits carried and earned, and quality points, are computed each semester. In addition to appearing on students' grade reports, these hourly totals are posted on the permanent academic record. "Credits carried" include all credit hours with grades other than P (pass), U (unsatisfactory), T (audit), I (incomplete), W (official withdrawal with participation), UW (unofficial withdrawal), SP (in progress-satisfactory progress), UP (in progress-unsatisfactory progress) and N/NG (no grade reported). Credits earned includes all credit hours for which grades of A, A-, B+, B, B-, C+, or C are reported. "Credits carried" differs from credits earned by the sum of credit hours with grades of F, UW and I/F "Total graduate hours" is the sum of credits earned, P hours, SP hours, UP hours, NG hours, and advanced standing. All graduate work, regardless of the University of Cincinnati college in which the work was done, is accumulated for graduate students. Approved transfer credits are included in the sum of credits earned, but quality points for those credits are not included in the grade point average.

For the complete graduate grading scale and a definition of all grades, consult the "Grading Scales and Definitions" page of the Registrar's Office website.

V. REGISTRATION

Alterations to the student's schedule involving the addition of one or more classes, changes in class sections, or changes in credit status, may be submitted by logging in to the web registration system or by submitting a paper form. The "Registration Change (Add/Drop) Form" may be obtained from the student's college or from the One Stop Student Service Center (University Pavilion 2nd floor) or a regional campus registration office.

From the eighth (8th) day of the term through the fifteenth (15th) day of the term, additions to a class schedule require only the approval of the instructor. Thus, only the class instructor's signature is required on the Registration Change (Add/Drop) Form" through the fifteenth day of the term. A college signature is not required.

Beginning with the sixteenth (16th) day of the term, however, both the approval of the instructor and the college are required, and so the "Registration Change (Add/Drop) Form" must be signed by both the instructor and a representative of the college offering the class.

The completed and signed "Registration Change (Add/Drop) Form" must be submitted in person to the One Stop Student Service Center, or regional campus registration office.

A. Adding and Dropping Classes

Enter the One Stop Student Service Center or a regional campus registration office to submit a completed "Registration Change (Add/Drop) Form" for processing. Add/drops are processed on a first-come, first-served basis.

If space is not available in the section that the student wishes to add, the student may attempt to add try other sections of that class (if offered).

Frequently check your schedule online to verify classes.

Full-time students who add credit hours over 18 will be charged additional fees for those excess hours. In addition, the credit hours over 18 must be dropped by the eighth calendar day of the term in order to have 100% of the charge for the excess hours removed.

B. Withdrawing from Classes

1. Academic Considerations

After the 15th calendar day of the term (consult the appropriate academic calendar for Summer term dates), but within the term, the student may withdraw from one or more classes, as follows:

Students may withdraw from classes through web registration if the instructor permits web withdrawals (refer to the instructor's class syllabus). Students and instructors both will receive e-mail notification of the withdrawal. Students are assigned a "W" grade at the time of the withdrawal, but instructors reserve the right to change the "W" to an "F" through the final grading process.

Students may also withdraw from classes in person by submitting a completed "Registration Change" form to the One Stop Student Service Center (University Pavilion, 2nd floor) for processing. The last day to withdraw from a class is the 58th calendar day of the term (consult the appropriate academic calendar for the specific date).

2. Financial Considerations

Official dropping from individual courses or completely withdrawing from the University must be initiated by the student in writing through the appropriate graduate office.

Examples of actions that are not considered official notice of withdrawal are: failure to attend class, giving notice to an instructor, stopping payment on a check used to pay fees, or verbal notice to any University office.

A refund will not be issued to a student who has been awarded a University Graduate Scholarship (UGS) to support their tuition. In the event of disciplinary suspension or dismissal, fees will not be refunded in whole or in part. Questions concerning interpretation of the regulations governing refund of student fees should be referred to the Registrar.

C. Audit Regulations

The audit option is intended for cases in which course work is desired or advised but in which, a grade for credit purposes is deemed unnecessary by the student in consultation with their Advisor. Students may elect to audit a course instead of receiving academic credit for a course up to the 7th calendar day of the term. Prior to the 7th calendar day of the term, a student may elect to take the course for credit. However, after the 7th calendar day of the term, the student will not be permitted to take the course for credit during that specific term.

Graduate students generally register to audit a course to obtain remedial/deficiency instruction in major or minor areas of their program of study. The student must discuss the course-work expectations with the instructor (e.g., attendance only) prior to auditing the course. Students who audit a course will be designated with an "A" grade type on the class and grade lists. A passing audit grade ("T") should not be awarded automatically by the course instructor, but rather only if the student has participated in the course to the level of faculty expectation for passing the course. It is possible, and at times appropriate, for the instructor to assign a grade of "F" to a student who has failed the course by not

meeting faculty expectations for participation. The "F" grade carries 0.000 quality points and is averaged into the grade point average if the course being audited carries credit hours.

Students who audit a course must pay regular fees for the audited course. At the end of the term, the instructor should enter a grade of "T" for those students who have met course participation expectations. Audit hours do not count toward the 174 credit hour limit (as a condition of eligibility for UGS), nor are they included in the determination of full-time status.

D. Student Status Options

1. Full-Time Student Status

- a. Students are enrolled for 10 or more credit hours in a semester. This includes DB Seminar, Journal Club and Lab Research.
- b. The Ohio Public Employees Retirement System (OPERS) does not make deduction from the students' pay.
- c. The program covers student Fees, which include Rec Center Membership.
- d. Student Health Insurance is automatic unless waived by the student and is covered by the program.
- e. Any previous student loans remain in deferment by default.

2. Part-Time Student Status

- a. Students are enrolled for less than 10 credit hours in a semester; typically only one credit hour of lab research.
- b. OPERS will make deductions from students' pay.
- c. The program covers student Fees but they do NOT include Rec Center membership. A part-time student membership can be purchased at current rates.
- d. Students must enroll for health insurance coverage and the program covers it.
- e. Student loans require special paperwork to remain in deferment.

	Credits	OPERS Deducted?	Rec Membership?	Health Insurance?	Loan Deferment?
Full-Time	10+	N	Υ	Υ	Υ
Part-Time	1-9	Υ	N	Υ	Υ

VI. ADMINISTRATION OF PROGRAM

The program shall be administered by an Executive Committee to consist of the Director of the Program (chair), Co-Director of the Program, Associate Director for Graduate Studies, Associate Director for Admissions, Associate Director for Curriculum and the Graduate Student Representatives and ad-hoc members.

A. Role of Director of the Program

The Director of the Program shall have responsibility for administration of the Program. The Director shall call faculty meetings, bring appropriate issues to the faculty for resolution, carry out policy decisions of the faculty, and appoint individuals and committees to carry out duties of the Program. It is ultimately the Program Director's responsibility to assure that activities related to the Program are carried out in compliance with University policies and needs. The Chairman of Pediatrics appoints the Director of the Program for a three-year term.

B. Role of Co-Director of the Program

The purpose of the Co-Director of the Program is to ensure an orderly transition at the end of a Director's term and is considered the Director-elect. The Co-Director shall work with the Director to perform the duties outlined above when the Director is indisposed. The Chairman of Pediatrics appoints the Co-Director of the Program for a three-year term to overlap with the term of the Director.

C. Role of Associate Director for Graduate Studies

The Associate Director for Graduate Studies shall have responsibility for dealing with student affairs. Duties shall include advising students on matters including curricula, maintaining student records, informing faculty of student progress, and informing students of their academic standing. The Associate Director for Graduate Studies shall also attend all Pre-Qualifier and Qualifier Committee meetings. The Associate Director for Graduate Studies shall also serve as an ex officio member of the Admissions Committee. The Director and Co-Director of the Program appoint the Associate Director for Graduate Studies for a three-year term.

D. Role of Associate Director for Admissions

The Associate Director for Admissions shall have responsibility for recruitment and admission of graduate students to the graduate program in Molecular and Developmental Biology. Duties shall include communicating with applicants, arranging interviews when appropriate, arranging admissions committee meetings and updating and maintaining recruitment material. The Associate Director for Admissions is the chairperson of the Admission Committee and shall organize the Admission Committee in consultation with the Director and Co-Director of the Program. The Director and Co-Director of the Program will appoint the Associate Director for Admissions for a three-year term.

The Associate Director for Admissions selects the members to serve on the admissions committee. The roster for the committee is then approved by the program directors. The admissions committee should contain at least two student representatives, elected by the student body. The students' representatives must be in good standing in the program or the Associate Director for Admissions can request replacements. The admissions committee interviews applicants and makes recommendations to the program directors about which applicants to render an offer of admission. Student representatives have equal voting rights as faculty members on the committee. The Associate Director for Admissions chairs the admissions committee meetings and interviews unless he/she is absent, in which case a surrogate may be appointed. Any disagreements between committee members may be referred to the program directors and executive committee if necessary.

E. Role of Associate Director for Curriculum

The Associate Director for Curriculum shall have responsibility for overseeing all graduate courses in the program. The Associate Director for Curriculum will also appoint Course Directors for each graduate course offered by the program and be responsible for overseeing the activities of those Course Directors. The Director and Co-Director of the Program will appoint the Associate Director for Curriculum for a three-year term.

F. Role of Ad-Hoc Members

Ad-Hoc Members will be appointed by the Director and Co-Director of the Program as needed and may include members with expertise in program finance, human resources, student recruitment, and/or faculty membership. These ad-hoc members shall have responsibility for advising the Executive Committee on those issues which fall under the purview of their specific area of expertise.

G. Appointment of Officers

The Director of the Program and the Co-Director of the Program are each appointed for three-year terms, by the Chairman of Pediatrics. The Chairman of Pediatrics, or his/her representative will solicit nominations. The Director of the Program and the Co-Director of the Program will appoint the Associate Directors.

H. Grievance Committee

The Executive Committee shall serve as the grievance committee. The grievance committee is responsible for dealing with student grievances according to University policy as described elsewhere in these program guidelines. In the event that a student is dissatisfied with the ruling of the program grievance committee, he/she is encouraged to pursue resolution through either the University Ombuds Office or the formal Graduate School Grievance Procedures.

I. Role of Program Coordinator

The Molecular and Developmental Biology Graduate Program is based in the Division of Developmental Biology at the Children's Hospital Research Foundation.

The Program Coordinator is the main contact person for the Program. individual attends to and coordinates the day-to-day activities of the program, including providing clerical support, monitoring budgetary activities, tracking student progress, providing guidance to faculty, coordinating committee activities, and organizing the student symposium. The Program Coordinator will also serve as a member of the Admission Committee and coordinate all activities related to the recruitment and admission of students to the program. Coordinator will also coordinate the CCRF/MDB Seminar Series in consultation with the Seminar Committee, which is appointed by the Director of the Division of Developmental Biology. Activities related to the daily operation of the program courses will also be the responsibility of the Program Coordinator, including but not limited to attendance tracking. Questions or concerns related to the program should first be brought to the attention of the Program Coordinator who will forward them to the appropriate individual when necessary. Coordinator is also responsible for developing and updating a procedure manual for activities related to the Molecular and Developmental Biology Graduate Program. The Program Coordinator shall attend the program's faculty meetings and prepare minutes.

J. Graduate Student Officers

Elections for Molecular and Developmental Biology student officer positions are held at the end of the Spring semester each year. Students may nominate themselves or others for any positions and then vote based on the nominations.

1. Admissions Representatives

Student Admission Representatives play active roles during the interview process and recruitment of new students each year. They are responsible for organizing the Thursday night dinners that take place prior to the interview day. On the interview day, the Student Admission Representatives read through applications of interviewees and sit in on each candidate's interview, and weigh in on the discussion and decisions following each interview session, including the official committee vote for admissions. Student Admission Representatives are also responsible for organizing the lab tours and demonstrations that take place on interview days. Two Admissions Representatives will be elected.

2. Student Representatives

Student Representatives act as liaisons between the MDB students and faculty. They attend MDB faculty meetings throughout the year where they address student questions and concerns as well as provide feedback at executive faculty

meetings. Student Representatives organize MDB faculty and student led journal clubs in the Spring and Fall semesters, respectively. Additionally, Student Representatives keep the MDB student posters up to date as new first year students join the program and upper classmen graduate. Student Representatives also organize the MDB officer elections at the end of the Spring semester. Two Student Representatives will be elected.

3. Seminar Coordinators

Seminar Coordinators organize the Wednesday seminars according to research focus and assign students to lunches and breakfasts with the seminar speakers based on mutual research interests. Additionally, seminar coordinators are responsible for hosting the Richard Akeson Memorial seminar speaker at the beginning of the school year. Two Seminar Coordinators will be elected.

4. HSGA Representative

One of the main goals of Health Sciences Graduate Student Association (HSGA) Representatives is to work with the HSGA and make Graduate Student Governance Association (GSGA) student awards known to all MDB students. It is important to maintain this affiliation with HSGA in order to allow MDB students the opportunity to apply for GSGA travel grants. Additionally, HSGA representatives are responsible for attending HSGA general meetings and notifying MDB students of GSGA activities, fundraising events and new university policies. One HSGA Representative will be elected.

5. Student Meeting Coordinator

Student meetings in the MDB program are typically held once a month during the academic year. The Student Meeting Coordinator organizes times, rooms and presenters for each meeting. MDB students give presentations as well as provide feedback to other students on presentation clarity, skill and data. Meetings may be organized to allow students to prepare for conferences, MDB student symposium, and committee meetings and to allow first year students to refine their presentation skills. One Student Meeting Coordinator will be elected.

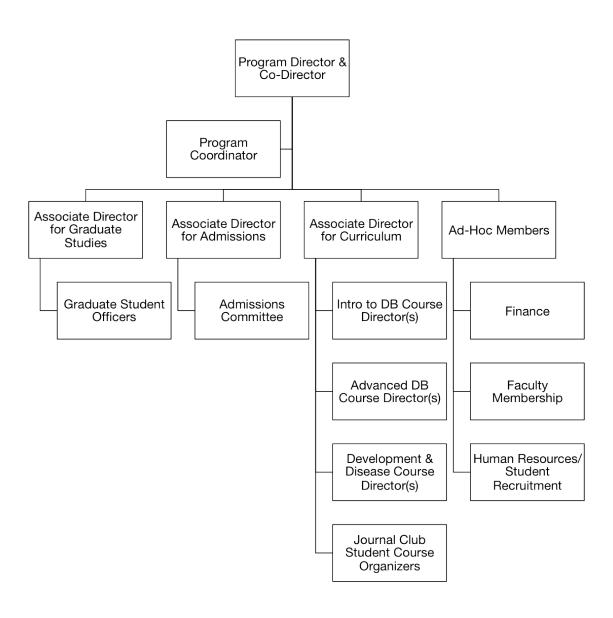
6. Social Coordinators

Social Coordinators organize social and recreational events that allow MDB students to socialize outside of the lab and introduce the first year students to upper classmen in the program. Several events are planned each semester, beginning with the official MDB Welcome Picnic. Previous events have included trips to local sporting events, skiing, Cincinnati Zoo outings and bowling. Two Social Coordinators will be elected.

7. Website Coordinator

The Website Coordinator is responsible for regularly updating the MDB program website with new developments and progress made by faculty and students. A major focus of the website coordinator is to increase the online visibility of the MDB program. An additional responsibility of the Website Coordinator is to facilitate interaction with international organizations, blogs and websites that are resources for prospective graduate students. One Website Coordinator will be elected.

K. Overview of Program Administration



VII. SPECIAL RULES AND PROVISIONS

A. Eligibility of University Faculty and Administrators for Graduate Degrees

No graduate degree will be granted to any faculty member above the rank of instructor who teaches in the same college in which the degree is to be granted. The only exception to the above rule applies to those members of the faculty who were, as of September 1, 1963, candidates for advanced degrees. This rule is applied also to adjunct appointments at any professorial rank and to interdisciplinary degrees when the same college is one of the interdisciplinary colleges; the only exception in the latter case will be when the faculty member was admitted to the interdisciplinary degree program prior to September 1, 1976.

No holder of an academic administrative title of Assistant Dean or equivalent or above shall be granted a graduate degree from the University of Cincinnati. The only exception will be when the administrator was admitted to the graduate program prior to September 1, 1976. This rule applies only to those who hold faculty rank above instructor. Those holding "equivalent rank" must petition the Graduate Council.

B. Non-Discrimination Policy

The University of Cincinnati reaffirms its policy that discrimination on the basis of race, color, religion, national origin, sex, sexual orientation, disability, status as a disabled veteran or veteran of the Vietnam era or age shall not be practiced in any of its activities. Furthermore, where past or present discrimination continues to have an adverse impact upon protected class members such as minority groups, women, disabled, Vietnam era veterans, or disabled veterans, the university will take affirmative action in carrying out its policy of nondiscrimination and equal opportunity for all. The Office of Equal Opportunity (University Hall, Suite 340) will address all complaints involving violations of the University of Cincinnati's nondiscrimination policy.

C. Right to Review Records

The Family Educational Rights and Privacy Act of 1974 (FERPA), is the federal law that governs the release of and access to student education records. FERPA affords students certain rights with respect to their education records. For the complete FERPA information, consult the "Records Privacy" page of the Registrar's Office website.

D. Grievance Procedures

Any graduate student who believes that he or she has valid grounds for a grievance should prepare a written statement of the grievance setting forth the specific allegations with reasonable particularity and submit it as follows:

- 1. To the Director of the Program for grievances against a faculty member of an agency associated only with that program with a copy simultaneously sent to the University Dean.
- 2. To the Dean of the College of Medicine for grievances against faculty members in two or more programs of that college or a college-wide agency with a copy simultaneously sent to the University Dean.
- 3. To the Dean of the Graduate School for grievances against faculty members in two or more colleges or a university-wide agency.

Program Review: Within one academic calendar week after the Director of the Program receives such a state of grievance, he or she will appoint an ad hoc review committee consisting of three disinterested members of that college's graduate faculty (excluding him or herself) and two disinterested graduate students, all drawn from that program, and will inform the grievant and all other parties to the grievance of these nominees. Either the grievant and all other parties to the grievance may challenge the disinterestedness of any nominee. When a committee acceptable to all parties to the grievance is appointed, this committee will convene within one academic calendar week after their appointment.

E. Academic Dishonesty

Academic dishonesty in any form is a serious offense and cannot be tolerated in an academic community. Dishonesty in any form, including cheating, plagiarism, deception of effort, or unauthorized assistance, may result in a failing grade in a course and/or suspension or dismissal from the Graduate Division. When a student is suspected of academic dishonesty a formal complaint should be brought the Executive Committee for review. The Executive Committee will then convene to discuss the allegation and decide on a proper course of action, within the guidelines of the University of Cincinnati.

The University has established formal procedures to deal with cases of alleged academic misconduct that are described in the Student Code of Conduct. Every student is required to adhere to the rules of the Student Code of Conduct and to follow the procedures set forth therein in cases where a violation is alleged. The first level of resolution of a complaint occurs between the student, faculty, and if needed the Dean of the College.

The student's Advisor or members of a student's committee may be contacted initially with a complaint. If the complaint can be resolved at this level, no further action is required. If not resolved, it is to be forwarded to the Executive Committee, which will make a formal recommendation for action to the Program Director. If resolved by the program, no further action is required. If not resolved, the complaint is forwarded to the Dean, who will appoint a committee to review the matter. Further appeals are possible as prescribed in the Student Code of Conduct.

All entering students will receive a copy of the Student Code of Conduct and will sign an acknowledgment indicating receipt. This acknowledgment will be retained in the student's permanent record.

Academic misconduct includes cheating (dishonesty or deception in fulfilling course or other academic requirements), fabrication (falsification of information), or plagiarism (using another person's work without assigning the originator proper credit).

F. Sexual Harassment

Law and University policy forbid sexual harassment. Sexual harassment is a matter dependent on the perceptions of the alleged victim of the harassment, not the alleged offender. Anyone perceiving that they have been treated inappropriately based on their gender may take their complaint to an officer of the program, their Advisor, or a member of their committee. There is also a formal institutional sexual harassment grievance procedure in place at both the University and the Cincinnati Children's Hospital Medical Center that may be used at the discretion of the individual.

G. Maternity/Paternity Leave Policy

Students in the Molecular Developmental Biology Program will be paid for no more than six weeks of maternity/paternity leave. Under extenuating circumstances as deemed by the student's physician, Advisor, and the Director of the Program, additional time may be granted. The student's Advisor and the Director of the Program, prior to the beginning of the leave, must approve all time off. The student's Advisor and the Director of the Program may approve additional time off without pay.

VIII. FACULTY MEMBERSHIP GUIDELINES

A. Goals

The goals of the Molecular and Developmental Biology Graduate Program are (1) to develop outstanding new scientists through guidance of thesis and dissertation research of participants in the program; (2) to provide formal courses, seminars, and journal clubs of the highest quality to the Molecular and Developmental Biology Graduate students and also the University of Cincinnati academic community; (3) to enhance the participants' breadth and depth of scientific expertise in fundamental issues in contemporary basic and biomedical science; and (4) to increase awareness both within the University of Cincinnati academic community and elsewhere of the potential contributions to basic and biomedical sciences of the information contained in and the approaches used by the discipline of Molecular and Developmental Biology. It is expected that new faculty have demonstrated independence in their research program and an ability to support a graduate student -- generally through grant funds. Applications would also be encouraged from individuals who might be expected to complement and/or develop strong interactions with the current faculty. The faculty should be thinking in terms of focused training areas, which will lead to training grants. Two-thirds of the faculty in the Program should have their primary appointments in the Department of Pediatrics. Faculty members are required to attend at least one third of the Faculty meetings as evidence of their continued interest in the Program.

The aspiration of the Program to excellence requires a vigorous and committed faculty. As membership in the Program is voluntary, it is clear that the goals of the Program will be met only through a high level of faculty involvement. Thus, new faculty members must have demonstrated that they share these aspirations, and the level of commitment of existing faculty members must be assessed periodically.

While the guidance of thesis/dissertation research is a major activity of the Program, some individuals may contribute significantly to the Program without acting as a student's Advisor. Faculty appointments will be made at either of two levels. One will be comprised of Training faculty who will act as mentors for students training in the Molecular and Developmental Biology Program. In addition, it is recognized that some individuals may contribute significantly to the Program without wanting to act as a student Advisor and such individuals can join as Program Affiliates. Faculty with either appointment will have equal voting privileges. It should be noted that students are permitted to select an Advisor who was on the training faculty at the time of their entrance into the Program, as long as that faculty member maintains adequate funding to support the student.

B. Nomination and acceptance procedures for New Training Faculty.

To meet the above stated goals, the following processes for consideration of Training faculty appointment and evaluation have been adopted.

- 1. Tenure track and non-tenure track Faculty members at the University of Cincinnati are eligible for admission to the Program.
- 2. The candidate should be willing to assume teaching, administrative, and related responsibilities within the Program.
- 3. Unless the nominee is an entry-level faculty, he/she should have a previous history of training of students either as a mentor or a member of student committees and be able and willing to provide stipend support for students under their supervision.
- 4. The funding source for students may not impose any restrictions or limitations on the ability of the student to publish their research findings.
- 5. Prospective MDB Faculty members should have sufficient major funding to support a student and his/her research or should be actively seeking funding if they are newly independent investigators.
- 6. Prospective MDB faculty should have established strong research productivity as indicated by first and/or last author publications.
- 7. Prospective MDB Faculty members should understand it is the expectation that Division Directors will provide funding for any students working under the faculty in their division, in the event that a faculty member were to lose funding.
- 8. MDB faculty members are required to have current and complete information on the MDB Website

The process for the nomination and acceptance of a faculty candidate for membership in the program should be as follows:

Candidates must be nominated by their Division Director and approved by the adhoc member for faculty membership. The application should include the following: a letter from the candidate which should define (1) his/her expectations from the Program, (2) contributions that he/she feels his/her expertise and background will provide to the Program, (3) supporting evidence for interest in Molecular and Developmental Biology which will include a summary of past research, graduate student training, and teaching experience and (4) a history of present and past research support; a current CV; a letter of support from a current member of the program faculty and; a letter of support from the candidates' Division Director outlining the division's willingness to cover any declared students in the event that the candidate should lose funding. This information should be forwarded electronically to the Program Coordinator who will forward to the ad-hoc member. This information will then be provided to the Faculty as a whole and the application will usually be voted on at the next general faculty meeting (held three times per year).

C. Reappointment of Current Training Faculty

All Faculty members in the Graduate Program have appointments of 6 years, after which time the ad-hoc member, appointed by the Director of the Program, will review the members and make recommendations to the faculty as to whether or not each reviewed faculty member should continue as faculty within the Graduate Program. The criteria for continued membership in the Program will be similar to those applied to the admission of new Faculty members and will be particularly

concerned with the extent of involvement of the Faculty member in teaching, administration, and other related tasks in the Program as well as the ability to support a student's research.

Prior to each review the Program Coordinator will request that each faculty member being reviewed submit a letter outlining their intention to remain with the MDB program as well as their training activities since their last review. A current CV should also be forwarded.

Appendix A Graduate Student Forms

1st Year Lab Rotations

NAME:				
ENTERING CLASS YEAR	:			
member initial on the appro this form <u>BEFORE</u> each re	priate line. Have the Ass otation. Once your rotat dinator in S3.441 and you	sociate Director ions are complete u will need to con	juarter and have that facult for Graduate Studies initially you should return this form nelete a lab declaration formuch.	al n
Lab Rotation:	Faculty Lab	Faculty Initials	Assoc. Dir. Grad. Studies Initials	
Rotation I				
Rotation II				
Rotation III				
Rotation IV				
Rotation V				
Rotation VI				
				I =
I hereby acknowledge that and all evaluation forms hunderstand that I cannot and returned.	ave been returned to the	ne MDB Progran	•	
Student Signature			Date	

WHEN COMPLETED, PLEASE RETURN THIS FORM TO:
Amanda Middleton
MDB Graduate Program
S3.441 (MLC 7007)

ROTATION ADVISOR EVALUATION

Rotation Advisor Signature

Rotation Date:	
EVALUATION te Program	

Date

ROTATION ADVISOR RESEARCH ROTATION E Molecular and Developmental Biology Graduate Prograi Student: _____ Date: ____ Rotation Advisor: Briefly summarize the goals of the rotation. Please summarize the strengths and weaknesses of the student in research. Will the student co-author on a publication? Yes No If the manuscript has been submitted, please include a copy. Would you consider taking this student in your lab? Yes □No ROTATION GRADE: _____

WHEN COMPLETED, PLEASE RETURN THIS FORM TO:
Amanda Middleton
MDB Graduate Program
S3.441 (MLC 7007)

STUDENT EVALUATION

Rotation	Number:	
----------	---------	--

STUDENT RESEARCH ROTATION EVALUATION

Molecular and Developmental Biology Graduate Program

Student:	Date:
Rotation Advisor:	
List the goals of this rotation and explain whether or not you w	vere able to accomplish them.
Summarize the rotation strengths and weaknesses as background and educational goals:	they relate to your scientific
If the rotation could have been improved, please make sugges	tions.
Will you co-author on a publication?	s 🗌 No
If the manuscript has been submitted, please include a copy.	
Would you consider taking your placement in this lab?	s
OVERALL RATING OF ROTATION: Outstanding Excellent Go	ood
Check here to have this evaluation copied to the research r	rotation advisor.
Student Signature	 Date

WHEN COMPLETED, PLEASE RETURN THIS FORM TO:
Amanda Middleton
MDB Graduate Program

LAB DECLARATION FORM

I have chosenPrinted Name of Faculty	's Lab for my thesis research.
Printed Name of Faculty	
Printed Name of Student	Student's UC ID # (MXX-XX-XXXX)
Student Signature	Date
I have agreed to accept this student in my laborate Developmental Biology Graduate Program. I hereby a support this	cknowledge that I currently have adequate funds to
Printed Name of Faculty	Faculty Division Name
Faculty Signature	Date
I hereby acknowledge that the above-mentioned fact mentioned student in his/her lab to complete thesis Graduate F	work for the Molecular & Developmental Biology
Printed Name of	Division Chief
Division Chief Signature	Date

WHEN COMPLETED, PLEASE RETURN THIS FORM TO:
Amanda Middleton
MDB Graduate Program
S3.441 (MLC 7007)

PRE-QUALIFIER COMMITTEE FORM

The Candidacy Committee of met on and approved the initial proposal for the qualifying exam with the following exceptions/stipulations:		
The exam must be schedu	led within 7 weeks of initial meeting.	
The qualifying exam is scheduled f	_	
Candidacy	Committee Members	
Signature (Chair)	Print Name	
Signature	Print Name	
_	e qualifier proposal will be the <i>independent</i> te, even if the proposal is written about the	
Student Signature	 Date	
Advisor Signature	 Date	
Associate Director for Graduate St	udies Date	

QUALIFIER COMMITTEE FORM

rne C	andidacy Committee met on		This is to certify that
			_ has
	Nan	ne of Student	
	Passed the comprehensive exam	ı.	
	Passed the comprehensive exam	with stipulations:	
	Failed the qualifying exam.		
	If the student chooses to retake t at least, a semester has elapsed. completed by	The preliminary meetir	ng must be initiated and
	Candidacy C	ommittee Members	
Signat	ture (Chair)	Print Name	
Signat	ture	Print Name	
Signat	ture	Print Name	
Signat	ture	Print Name	
Signat	ture	Print Name	
Stude	nt Signature		Date
Adviso	or Signature		Date
Assoc	iate Director for Graduate Studies		 Date

GRADUATE SCHOOL APPLICATION FOR ADMISSION TO DOCTORAL CANDIDACY (To be completed by the department and returned to the Graduate School, ML 627)

From: College	Department	
	, Graduate Program Director	
This is to certify that		
ID Number		
Has satisfactorily passed the comp	prehensive examination required for admission to	
candidacy for the degree of		
DISSERTATION COMMITT	TEE MEMBERS:	
		, CHAIR
Print Name	Signature	
Print Name	Signature	-
Print Name	Signature	_
The Committee has not been sele	ected	
Examination Date		
Graduate	e Program Director Signature Date	

OFFICIAL CANDIDACY DATE

SUMMARY OF ANNUAL DISSERTATION COMMITTEE MEETING

Student Name:	Date	Date:	
Committee Members in	Attendance (Other than	Advisor):	
Printed Name	Signature		
Printed Name	 Signature		
Summary of Student Progress (Advisor):	☐ Satisfactory	☐ Unsatisfactory	
Has the student published any papers as fir	st author? □ Yes □	No	
If yes, who wrote the paper?			
Is it expected that the student will graduate	this academic year?	l Yes □ No	
If yes, what is the target date for the oral de	fense?		
Advisor Signature		Date	
Student Signature		Date	
Associate Director for Graduate Studies	 Signature Γ	Date	

SUMMARY OF ANNUAL DISSERTATION COMMITTEE MEETING

COMMENTS

(Attach as Needed)

Advisor/Committee Member:	
Student Name:	Date of Committee Meeting:
COMMENTS:	

APPLICATION FOR THESIS DEFENSE

Name:	ame: Date:	
Thesis Title:		
Pro	pposed Date & Time of Defense**:	
**Please note that this date may NOT b	be less than 6 weeks prior to the end of the semester in which you wish to graduate.	
Do you need to schedule a roon	n? ☐ Yes ☐ No, I have scheduled the following:	
	this student is well prepared for defense of his/her thesis and with both defense and graduation pursuant to College and	
Chair/Advisor	Signature	
Committee Member	Signature	
Student Signature	Date	
As Associate Director for Graduat outlined above.	e Studies, I hereby approve the proposed thesis defense as	
Associate Director of Graduate St	tudies Signature Date	

Appendix B Qualifying Exam Guides

The Doctoral Candidacy Examination

- 1. Carefully <u>review</u> the relevant sections of the MDB graduate student handbook and the "Qualifier Frequently Asked Questions" document.
- The purpose of the examination is to assess the ability of the student to successfully complete the requirements for the doctoral degree. Important areas of assessment include, but are not limited to, depth of knowledge, creativity and intellectual independence.
 - The examination consists of two parts, a written proposal and an oral examination. The oral examination may cover any aspect of MDB training in addition to questions related to the written proposal.
- 3. The topic of the written proposal may or may not be related to your thesis. Regardless of the topic, your proposal MUST be the product of your independent intellectual effort. You may discuss your ideas, but you may not solicit ideas i.e. the hypotheses and underlying experiments should be you intellectual invention.
- 4. The <u>examination committee</u> is composed of 3 MDB faculty members (not including your mentor) and one individual who is not a member of the MDB program. You must also have a Program official (Program Director or Director of Graduate Studies) attend both the pre-meeting and examination. Be sure to communicate the names of all committee members to the Program Coordinator before the pre-meeting.
- 5. The <u>pre-meeting</u> (initial meeting) is the forum in which you will present your specific aims to the committee for evaluation. The format should follow that specified for an NIH application i.e. typically <u>one</u> page (no more than 2 pages). The summary (specific aims page) should include a <u>few</u> sentences of background, a clear statement of your central hypothesis and 3-4 specific aims that test your central hypothesis. It is acceptable (and advisable) to review successful grant applications in order to ensure that the appropriate format is followed.

You should prepare a 15-20 minute talk to clearly explain you hypothesis and specific aims. Do <u>not</u> focus to methods but rather to ideas/concepts. However, it is important to be sure that the ideas you present are "testable" i.e. that the methods are available/will work.

The committee will either (1) approve your specific aims, (2) ask you to revise them or (3) ask you to compose new specific aims. In the event of the latter two outcomes, it may be necessary to reschedule another pre-meeting.

- 6. Students may ask committee members to clarify any comments/suggestions offered during the pre-meeting (this can be done any time up to the examination). Once your specific aims are approved you have 6 weeks to submit your final proposal. The examination must be scheduled for 7 weeks ± 1 week from the date of the pre-meeting. Please note that while there is some flexibility in the examination date (in order to accommodate committee members' schedules), the proposal must be submitted to the committee by the 6-week deadline.
- 7. Except under extraordinary circumstances, your pre-meeting should be completed by the end of April.
- 8. The page limitation for your proposal will be determined by your committee. Typically, 15 pages of single-spaced (11 point font) are the <u>maximum</u> (not including the bibliography).
- 9. The examination is typically 2 hours long. Be sure to schedule the room for at least 2-1/2 hours. You should prepare a 20 minute overview of your proposal with the understanding that the committee will likely interrupt your presentations to ask questions. Simple diagrams/figures that clearly illustrate molecular pathways under investigation may be very helpful (pictures are frequently a better way to get your point across rather than just text).
- 10. At the end of the examination, you and your advisor will be asked to leave the room while the committee deliberates. The three possible outcomes are:

Pass: Both the written and oral examinations were outstanding and no further work is required.

Pass with stipulations: The committee agrees that the student has the ability to succeed in the MDB program but one or more aspects of the written and/or oral examination were deficient. The guiding principle is to remedy weaknesses that may negatively impact career development. The committee has wide latitude ranging from rewriting a portion of the proposal to re-examination and/or requiring formal course work to address a specific weakness. Specify a timeframe for completion of requirements (usually 1-2 weeks, longer if course work is recommended).

Fail: Serous, multiple deficiencies. The discussion should focus to evaluation of the student's ability to succeed/continue in the MDB program. The Mentor should enter into this discussion and it may be useful to consult with the MDB Program Director or Director of Graduate Studies for guidance. Options include (but are not limited to) a complete re-examination or recommendation to switch to MS degree track.

- 11. Be sure to obtain the appropriate signature forms from the Program Coordinator and bring them to the pre-meeting and the examination.
- 12. If you have questions, please review the attached "Qualifier Frequently Asked Questions." The Director of Graduate Studies is also available to answer any questions regarding the examination process.

Practical Matters

- It is not necessary to provide food and drink for the committee members.
- Have others read your proposal for grammar, etc. (however, intellectual development of ideas is strictly prohibited).
- Look at other grants!
- Reserve a room for <u>at least</u> 1 hour for the pre-meeting and 2 hours for the examination.

Responsibilities of Chairperson

Pre-meeting:

The <u>first</u> order of business is to select the chairperson who will then guide the examination process.

- 1. Ensure appropriate committee composition (3 MDB faculty- not counting the Mentor- and 1 outside member).
- 2. Allow the student to present <u>without</u> interruption (except for clarification) i.e. discourage "examination" of the student. The goal of this meeting is to approve/disapprove the proposed specific aims.
- Guide discussion of the presentation to determine if the specific aims are sufficiently robust to proceed to writing the full proposal. If not, determine whether another pre-meeting is required or if revised aims can be reviewed by email.
- 4. Establish that there is no intellectual overlap between the student's proposal and ongoing/proposed work by the Mentor.
- 5. Determine the maximum length of the written proposal (recommendation is 15 pages)
- 6. Ensure that the examination date is set for 7 weeks +/- 1 week from the date specific aims are approved (there is some latitude here if scheduling conflicts arise).
- 7. Explain to the student that from this point forward he/she is to receive <u>no</u> help in the intellectual development of the proposal; however, questions pertaining to specific methods or techniques are permitted.
- 8. Ensure that the candidacy committee form is completed.

Qualifier Examination:

- 1. Ensure that the proposal is submitted to committee members by the 6-week deadline (note that this date is firm).
- 2. Solicit questions from the committee prior to the exam. The goal is to identify the <u>major</u> weaknesses in the written proposal that will serve as the framework for the oral examination. Committee members are encouraged to "drill down" as deeply as they deem necessary and to expand the scope of questions in order to provide a rigorous examination.
- 3. Ask the student and Mentor to leave the room before the exam begins and briefly discuss the broad questions to be covered and the format of the exam i.e. allow the student to present without interruption or limited interruption (questions after each specific aim).
- 4. Intervene when necessary to prevent "leading" questions that reduce the rigor of the examination. Leading questions are appropriate when it is obvious that the student does not know the answer to an important question (to help him/her understand what they do not know).

- 5. Ensure that the student is treated "fairly" during the examination process. Humiliation is never appropriate.
- 6. Ensure that the Mentor does not intervene in the examination process.
- 7. At the end of the examination, ask the student and Mentor to leave the room. The Chair should guide discussion of the student's performance asking for both strengths and weaknesses. These will be listed in a brief report prepared by the chairperson, along with recommendations for revision (if any), to be given to the student. After discussion, review with the committee the 3 possible outcomes:

Pass: Both the written and oral examinations were outstanding and no further work is required.

Pass with stipulations: The committee agrees that the student has the ability to succeed in the MDB program but one or more aspects of the written and/or oral examination were deficient. The guiding principle is to remedy weaknesses that may negatively impact career development. The committee has wide latitude ranging from rewriting a portion of the proposal to reexamination and/or requiring formal course work to address a specific weakness; the Mentor may enter into this discussion at the discretion of the Chair. Specify a timeframe for completion of requirements (usually 1-2 weeks, longer if course work is recommended).

Fail: Serious, multiple deficiencies. The discussion should focus to evaluation of the student's ability to succeed/continue in the MDB program. The Mentor should enter into this discussion and it may be useful to consult with the MDB Program Director or Director of Graduate Studies for guidance. Options include (but are not limited to) a complete re-examination or recommendation to switch to MS degree track.

8. In the event that the outcome is "Pass" or "Pass with stipulations," ensure that the "Graduate School Application for Admission to Doctoral Candidacy" form is completed.

Responsibilities of Committee Members

Pre-meeting:

The <u>first</u> order of business is to select the chairperson who will then guide the examination process.

- 1. Allow the student to present <u>without</u> interruption (except for clarification) i.e. discourage "examination" of the student. The goal of this meeting is to approve/disapprove the proposed specific aims.
- 2. Determine if the specific aims are sufficiently robust to proceed to writing the full proposal. If not, determine whether another pre-meeting is required or if revised aims can be reviewed by email.
- 3. Establish that there is no intellectual overlap between the student's proposal and ongoing/proposed work by the Mentor.
- 4. The examination date is set for 7 weeks +/- 1 week from the date specific aims are approved (there is some latitude here if scheduling conflicts arise). From this point forward the student is to receive no help in the intellectual development of the proposal; however, questions pertaining to specific methods or techniques are permitted.

Qualifier Examination:

- 1. The Chairperson will solicit questions from the committee prior to the exam. The goal is to identify the <u>major</u> weaknesses in the written proposal that will serve as the framework for the oral examination. Committee members are encouraged to "drill down" as deeply as they deem necessary and to expand the scope of questions in order to provide a rigorous examination.
- 2. The student and Mentor will leave the room before the exam begins to allow the committee to briefly discuss the broad questions to be covered and the format of the exam i.e. allow the student to present without interruption or limited interruption (questions after each specific aim).
- 3. Avoid "leading" questions that reduce the rigor of the examination. Leading questions are appropriate when it is obvious that the student does not know the answer to an important question (to help him/her understand what they do not know).
- 4. At the end of the examination, the student and Mentor will leave the room. The Chair will guide discussion of the student's performance asking for <u>both</u> strengths and weaknesses. Some things to consider in evaluation of the student's performance:
- How many times were "leading" questions required in order to arrive at a satisfactory answer?
- Ability to "think on their feet"
- Breadth of knowledge
- Quality of written proposal

5. Decide which of the 3 possible outcomes is appropriate:

Pass: Both the written and oral examinations were outstanding and no further work is required.

Pass with stipulations: The committee agrees that the student has the ability to succeed in the MDB program but one or more aspects of the written and/or oral examination were deficient. The guiding principle is to remedy weaknesses that may negatively impact career development. The committee has wide latitude ranging from rewriting a portion of the proposal to reexamination and/or requiring formal course work to address a specific weakness. The Mentor may enter into this discussion at the discretion of the committee. Specify a timeframe for completion of requirements (usually 1-2 weeks, longer if course work is recommended).

Fail: Serious, multiple deficiencies. The discussion should focus to evaluation of the student's ability to succeed/continue in the MDB program. The Mentor should enter into this discussion and it may be useful to consult with the MDB Program Director or Director of Graduate Studies for guidance. Options include (but are not limited to) a complete re-examination or recommendation to switch to MS degree track.