

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

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(Contents are in compliance with the rules and policies of the University of Cincinnati Graduate School)

## I. APPLICATION AND ADMISSION TO GRADUATE DEGREE PROGRAMS

### A. Application

#### 1. Process

The interested student must complete the University Graduate Application and arrange for three personal references, GRE scores, and a copy of all their official transcripts to be sent to the Program. The University Application, accompanied by a check for the \$40 non-refundable application fee payable to the University of Cincinnati, should be mailed directly to the University Dean's Office according to the instructions on the form. The Molecular and Developmental Biology Program Application should be mailed directly to the Molecular and Developmental Biology Program.

After preliminary screening of all 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 prospective student.

Applications and all supporting documents are accepted any time, but should be completed by March 1 for admission beginning in the fall of the same year. For optional 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. An overall GPA of at least 3.0 on a 4 point scale is expected. Qualified students with deficiencies in their undergraduate preparation are expected to remedy these before or during the early part of their graduate education. All applicants are expected to take at the earliest date possible both the general and an advanced test (biology, or biochemistry) of the Graduate Record Exam (GRE), administered by the Educational Testing Service, Princeton, New Jersey, 08540. All applicants are required by the Graduate School to have obtained a baccalaureate degree before entering the graduate program.

#### 3. Types of Admission

##### a. 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.

b. Provisional Admission

Provisional admission may be granted to applicants who lack undergraduate work considered essential for graduate study in the major field. Course work, without graduate credit, will be required of provisionally-admitted students to make up such deficiencies before admission to full graduate standing can be granted.

Graduates of non-accredited institutions may be granted provisional admission when their academic records warrant this status. Additional course work will be required of such students when deficiencies in their previous training are apparent.

Graduates of accredited institutions whose scholastic records are below the standards for admission to full graduate standing may be admitted provisionally when extenuating circumstances can be shown to have affected their undergraduate grade point averages or when progressive improvement in the undergraduate programs warrants provisional admission.

Graduate students may attain full graduate standing when the deficiencies responsible for their provisional status are corrected. They must also have maintained a satisfactory academic record in all course work taken as part of their graduate program. Change from provisional to full graduate standing is effected, generally, by the Director of the Program. The bases for such changes in status are subject to review by the University Dean, and that office should therefore be routinely notified of each change of status.

c. Unclassified Graduate Student

Unclassified graduate students are admitted to the Graduate Program for study, but not admitted for graduate degree programs. They may take courses for graduate credit, but the number of credits taken under this classification which are accepted for a degree program is at the discretion of the Program; ordinarily it will not exceed 15 graduate credits. The only requirement for admission as an unclassified student, or special student, is evidence of a baccalaureate degree.

d. International Student Admission

No international student can be granted admission on any basis other than full graduate standing. 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.

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. This requirement may be waived (with permission from the University Dean) 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. Presently, the minimum University TOEFL score acceptable for graduate work is 560.

The Oral English Proficiency (OEP) Testing Program was implemented in 1986 to assess the oral English language skills of graduate students who are nonnative speakers of English and receive financial awards from general University funds. Students are required to take the test during their first year of study. Their oral English skills are rated in four areas: 1) pronunciation; 2) grammar; 3) fluency; and 4) overall intelligibility. Those who pass are certified for oral English proficiency and may assume the full range of duties associated with their financial awards. Those who do not pass are recommended for an English as a Second Language (ESL) course that is suited to their needs. Students whose oral English proficiency has not been certified may not assume instructional responsibilities. Oral Proficiency testing is conducted four times during the academic year (September, December, March and May) to accommodate new arrivals and students who have prepared to retake the test. Each student can only be tested twice during an academic year.

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

#### 4. Admission and Financial Aid Decisions

##### a. Admission Decisions

All decisions concerning admissions to our graduate program rest with the Admissions Committee. The Committee has the authority to set application deadlines, to require certain pre-admission examinations, to 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 Program violated a Graduate Division policy or failed to apply fairly and consistently the criteria established by the Program.

##### 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, referred to as a UGS) throughout their training. 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 entrance into the Master's track. Likewise graduate assistantship stipend support (referred to as a GA) will be provided to all students in the program, based on performance and availability of funds. An allowance for health insurance is included in the stipend. Under ordinary circumstances, assistantships and tuition scholarships will not be awarded to students who have accumulated 260 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

The Supplementary Information Form must be completed prior to registration by the following individuals:

- 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 their Master's degrees and are admitted to Ph.D. programs.

## 2. Physical Examination (University Regulations)

A physical examination is required of each applicant. A tuberculin Skin Test or chest x-ray is required within three months of registration.

## 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.

# II. DOCTORAL AND MASTERS 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 Director of Graduate Studies with advice, as needed, from the Initial Advisory Committee. 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 minimum requirement for the doctoral degree is three years of full-time graduate study, or its equivalent, of which the last year must be in residence in the University of Cincinnati or under the University's direction. Eligibility for graduation requires a minimum of 135 graduate credits, the last 45 of which, exclusive of research credits, must be completed at the University of Cincinnati. In no case, however, will a degree be granted solely on the basis of the accumulation of the required number of credits. The Program will recommend students for degrees only after they have developed the necessary intellectual maturity and have fulfilled all other requirements of the Program and the Graduate Division.

## 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 their didactic courses and research courses.

2. Students obtaining an F in any didactic course are automatically placed on academic probation during the quarter following receipt of the grade of F.
3. Any student who fails to obtain a B average in their required didactic courses for any given quarter will be placed on academic probation for the following quarter.
4. Finding a lab placement before the beginning of the second year. Failure to find a lab placement and advisor is grounds for dismissal.
5. Determination of normal progress in the Program is defined as:
  - a. obtaining a grade of B or above in all didactic and research courses required by the Molecular and Developmental Biology Program;
  - b. passing all required courses in the Program and any additional courses required by the student's Research Candidacy Committee;
  - c. completion of a total of 45 graduate credit hours for the master's degree and 135 graduate credit hours for the doctoral degree within the specified time stipulated by the rules of the Graduate School of the University of Cincinnati;
  - d. completion of at least two lab rotations;
  - e. presentation of required seminars;
  - f. participation in the program's Journal Club;
  - g. establishment of a Doctoral Candidacy Committee by the sixth quarter;
  - h. Eligible students are required to convene a meeting of their Candidacy Committee to discuss the acceptability of their Preliminary Proposal by the end of winter quarter of their second year in the program;
  - i. submission and oral defense of a satisfactory doctoral dissertation or its equivalent within the time limit specified by the graduate school.
6. Any student who is placed on academic probation two times will be dismissed from the doctoral program unless there are extenuating circumstances as determined by the faculty in the Graduate Program in Molecular and Developmental Biology.
7. Student progress in the program will be monitored by the faculty of the Graduate Program in Molecular and Developmental Biology after completion of each quarter in the program. The progress of each student will be reviewed in terms of success in didactic course work and research progress. Students failing to meet the minimum requirements will be placed on academic probation. Students placed on academic probation two times will be subject to dismissal from the program. A written statement will be issued to each student at the end of each year in the program informing them of their progress and advising them concerning financial support for the next year. It should be understood that continued support depends on both the acceptable performance of the student and the availability of funds for stipend/tuition support.

8. Students supported by fellowships or stipends must not seek employment outside the program. In exceptional situations short term laboratory, research or teaching jobs may be permitted but other jobs requiring significant time away from the research laboratory will not be allowed and such employment may result in loss of stipend support. Any student considering outside employment must first discuss this with his/her mentor and the Director of Graduate Studies.
9. A written assessment of performance for each student is required at the end of a student's first year; an annual review or some other form of formal evaluation of progress is required throughout a student's program.

#### D. Options when Minimum Academic Standards are not met

If a student is placed on academic probation twice, the student has the following options:

1. No action: If the student takes no action, then his/her standing will be brought before the faculty at the next faculty meeting where the Director of Graduate Studies or his/her designee will present the case to the faculty for a vote for or against of dismissal from the program.
2. Extenuating circumstances: If the student believes there are extenuating circumstances why his/her performance has not met the minimum requirements of the program, he/she may submit a written petition to the Director of Graduate Studies explaining these circumstances. These will then be taken before the faculty at the next faculty meeting and presented, whereupon the faculty will either vote to accept or reject the petition. A vote to reject the petition constitutes a vote for dismissal from the program.
3. Withdrawal: A student may elect to withdraw from the program prior to the faculty taking a dismissal vote. This allows the student to prevent a dismissal action from appearing on their academic transcript.
4. Transfer to the Master's Track: A student may transfer to the Master's degree track within the MDB program by requesting to do so in writing. If the program approves the transfer the student will be allowed to complete the requirements for the Master's degree and graduate (terminal M.S.), with the following requirements:
  - a. 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 their stipend after the end of the student's first year in the program.
  - b. 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.

#### E. Residency

All doctoral students must remain enrolled for at least twelve graduate credits during each of three quarters within a span of five consecutive quarters, including the summer quarter, so long as they register for each autumn quarter involved. (Note: This would permit a residence pattern of in-out-in-out-in during five consecutive quarters.)

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

#### F. Foreign Language Requirement

There is no foreign language competency requirement other than the English competency requirement for students whose native language is not English.

#### G. English Proficiency Requirement

All foreign students must prove proficiency in the English language before the end of their second year in the program. The Oral English Proficiency Test is given each quarter and must be passed to prove proficiency. This exam must be first taken during the first year of study. The exam can only be taken two times per year. If the Oral English Proficiency Test has not been passed each student is required to take the English Communications course offered each quarter until proficiency is proven. In addition, it may be recommended that this course be taken in the second year even if the Oral exam has been passed. Additional course work will be determined by the student's advisory committee.

#### H. Requirements for the Doctor of Philosophy Degree

##### 1. Overview of Requirements

- a. Achieved and maintained a Grad Point Average (GPA) of at least 3.0 in all doctoral course work.
- b. Satisfactorily completed all required course work and accumulated at least the minimum total of graduate credits specified by the Program.
- c. Establish Doctoral Candidacy Committee and Dissertation Research Committee (if different) and satisfy requirements of these Committees.
- d. Successfully complete an oral and written candidacy examination for admission to candidacy. After the student passes the candidacy examination, the student is automatically eligible for a doctoral research UGS.

- e. Submit a dissertation based on experimental investigations of considerable magnitude, giving evidence of originality and ability for independent research.
- f. The student must be a candidate for the doctorate degree for at least seven months before the degree is granted.
- g. The student should give a completed copy of his/her dissertation to every member of the Dissertation Research Committee at least two weeks before the date of the public defense of the dissertation.
- h. Public notification of the defense of the dissertation should be two weeks before actual defense takes place.
- i. Completion of 135 graduate credit hours is required.
- j. Successfully defend the dissertation.
- k. Satisfactory completion of all Molecular and Developmental Biology Program requirements.
- l. All IP and I grades must be removed from transcripts.
- m. Activities required for graduation.
  - 1. Pick up Doctoral Candidacy packet at Graduate Office.
  - 2. Complete formal application –for-degree form and alumni office record.
  - 3. Submit receipt for payment of binding fee to Graduate Office.
  - 4. Submit two bound copies of dissertation to the Division of Research and Advanced Studies (paid by student) or opt for the electronic dissertation submission.  
Submit one bound copy to Advisor (paid by Program) or the electronic version submitted to the graduate school.  
Submit one bound copy to Molecular and Developmental Biology Program (CHRF - Room 3013) (Paid by Program) or the electronic version submitted to the graduate school.  
Any additional copies will be paid by the student.
  - 5. Submit completed "Approval of the dissertation by the committee" form to the Graduate Office.
  - 6. Complete "Survey of earned doctorates" form to the Graduate Office.
  - 7. Complete form for conferral of degree in absentia (if applicable).
  - 8. Submit dissertation to Graduate Office

Note: Candidacy for the doctorate automatically terminates after four consecutive calendar years. Candidates may petition the Graduate Council through the Program, college, and the University Dean for extension of candidacy

prior to its expiration or for reinstatement if candidacy has expired. If reinstatement is approved, the student will be readmitted to candidacy only after satisfying the formal candidacy examination requirements administered by the Program. 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.

## 2. Initial Start Date

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

## 3. Lab Rotation and Selection of Research Advisor

Two laboratory rotations of one quarter each are required but it is recommended that each student participate in a third laboratory rotation. Due to the lack of required course work during the summer, two rotations can be completed before the start of the fall quarter.

All first year students will be required to submit their first, second and third choices for Research Advisor at the end of Winter Quarter to the Director of Graduate Studies (unless an extension is granted). Final decisions as to placement of students will normally be decided at the beginning of Spring Quarter. This selection procedure should enable all students an equal opportunity at choosing labs. It will still be up to the individual faculty members as to which and how many students they will accept into their laboratory. The role of the Initial Advisory Committee will be to facilitate this process as needed.

## 4. Initial Advisory Committee

The Initial Advisory Committee will assist the Director of Graduate Studies in the guidance of first year graduate students in the Program. It is the committee's responsibility to advise incoming students of appropriate courses to take when needed. Advance standing in any course may be recommended by the committee. Courses can also be required of provisionally-admitted students to make up deficiencies in their previous training. This committee may be involved in the selection of a Research Advisor when conflict arises. The Initial Advisory Committee is composed of the Director of Graduate Studies, the Director of Admissions and at least two other Molecular and Developmental Biology faculty members appointed by the Director of the Program.

## 5. Research Advisor

The Research 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 Research Committee.

## 6. Research Candidacy Committee

A candidacy committee is to be appointed by the faculty for each student prior to the Doctoral Candidacy Exam. For doctoral students, the committee consists of the advisor, at least 3 additional 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 5 members, but it is permissible to appoint more than 5. Duties of the candidacy committee are to help guide the student during the candidacy examination process. Proctoring of the Doctoral Candidacy Exam is the primary responsibility of this Committee. The number of Research Candidacy and/or Dissertation Research Committees that a faculty member may be on cannot exceed 8 (excluding those in which the faculty member is the Advisor).

## 7. Doctoral Candidacy 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 candidacy examination will be administered by the Doctoral Candidacy Committee (below).

*It is important for both the student and mentor 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 mentor's lab (including the candidate's dissertation research), then both candidate and mentor must sign off on 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 mentor. The details of the proposal including background and experimental design should however be formulated and written by the student. Inclusion of material from previously written work from the mentor's lab will result in failure of the candidacy exam.*

There are three stages to the candidacy examination:

- 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 which 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); a form will be completed formalizing this date and returned to the Director of Graduate Studies and Program Coordinator. 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 quarter.
- 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. The final proposal is to be in NIH format and should include an abstract, specific aims, background and significance, and research plan sections. As guidelines, the specific aims should be one page in length, the significance 3-5 pages, and the entire proposal not more than 25 single spaced or 50 double-spaced pages (excluding references). During the interval between submission of the final proposal and examination, the student and their advisor should discuss how a budget is developed. Shorter proposals are acceptable. 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 none will be offered by other students, faculty, or any other individual. 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. Such guidance will be given by the student's advisor or his/her designee. 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. This assistance will also be given by the advisor or his/her designee.

- 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 10-20 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 leave the room.

Performance on the exam is determined by a private 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, copies of a short written report of the student's performance will be prepared by the chair 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 Molecular and Developmental Biology office 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. Other requirements may be mandated by the committee 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 are 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. Should the student fail

to pass the examination on the second attempt, they will be terminated from the Program.

b. Timing of the Candidacy Examination

Eligible students are required to convene a meeting of their Candidacy Committee to discuss the acceptability of their Preliminary Proposal by the end of winter quarter 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. When the proposal is approved, the student has up to seven weeks to prepare and submit a Final Proposal to the committee. 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 penalties as determined by the Initial Advisory Committee (e.g., dismissal, failure of the examination, suspension of stipend, etc.). 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.

c. Retaking of the Doctoral Candidacy Examination

No second examination for candidacy should be held until at least a quarter has elapsed. Should the student fail to pass the examination on the second attempt, they will be terminated from the program.

8. 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 additional 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 twice a year and will be documented by completion of an evaluation form by the Research 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.

## 9. Submission of Dissertation

### a. Traditional Model:

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 bound dissertation would then consist of reproductions of work published or in press and also any additional literature review, methods, results, and/or discussion deemed necessary by the student's advisor and committee. This second option can be selected by the student with the approval of the research advisor and a majority of the Dissertation Research Committee.

Under normal circumstances reproductions of two scientific papers written by the student on which the student is first author and also additional material as deemed necessary will then constitute the dissertation. The papers must represent, in the view of the student's Dissertation Research Committee, significant contributions to the scientific literature and must appear in peer reviewed journals. Publications which do not meet these criteria include abstracts, brief notes, preliminary communications, book chapters, review articles and papers under review for publication.

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.

## 10. 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 Research Committee will ask pertinent questions of the candidate. At the conclusion of the defense, the student will withdraw, and the Dissertation Research Committee will make a decision forthwith 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 transmitted to the appropriate office of the Graduate Program and then forwarded to the graduate school. At least 4/5 of the voting members of the dissertation committee must approve the dissertation.

## 11. 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 five (5) years before achieving candidacy and 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.

Students failing to complete their doctoral degree requirements by the time limit on candidacy are automatically expelled from candidacy by the Graduate Division. Students may petition the Graduate Division for reinstatement or extension of candidacy at their discretion. 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 her/his 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 Director of Graduate Studies. The Director of Graduate Studies will prepare a letter in support of the petition. 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.

## 12. Exit Survey

The Division of Research and Advanced Studies, 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.

### III. PROGRAM REQUIREMENTS

#### A. Class Requirements

1. Graduate course requirements for Ph.D. degree are:
  - a. Students complete approximately 135 quarter credit hrs, of which 45 credit hours must be graduate coursework. Students choose the appropriate coursework and timetable according to their backgrounds and interests, in consultation with the Director of Graduate Studies and Curriculum Director.
  - b. Students are required to participate in Journal Clubs and attend weekly Seminars organized by the Pediatric Department and MDB program
  - c. Students are required to take the Ethics in Research course in the winter quarter of their second year.
  - d. 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.
2. The following applies only to Teratology students:
  - a. The Teratology course is required.
  - b. It is also strongly recommended that courses be taken in: statistics, pharmacokinetics, drug metabolism, and/or neuroscience.

#### B. Suggested Course Schedule

1. Courses in Developmental Biology, Molecular Genetics and Cell Biology. Students choose the appropriate coursework according to their backgrounds and interests, in consultation and approval by the Director of Graduate Studies and Curriculum Director.

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

<b>Fall</b>		<b>Winter</b>	<b>Spring</b>
Intro Dev Bio (2) 26-DB-985		Advanced Mol Gen(4) 26-MG-710	Advanced Dev Bio (4) 26-DB-986
Intro Mol Gen(4) 26- GNTD-871	o r	Cell I (4) 26-GNTD-872	Mol Biol Cell 2 (4) 26-GNTD-862
Journal Club (1) 26-DB-904		Journal Club (1) 26-DB-904	Journal Club (1) 26-DB-904
Seminar (1) 26-DB-901		Seminar (1) 26-DB-901	Seminar (1) 26-DB-901
Research (4) 26-DB-972		Research (2) 26-DB-972	Research (6) 26-DB-972

In the second year, students complete their course requirements by choosing further electives. Examples include:

Development and Disease (26DB987)

Introduction to Biostatistics (26BE787)

Immunobiology (26IMM888)

Neuroscience: Development, Regeneration and Plasticity (26NS842)

Biology of Cancer (26CB880)

Molecular Biology of the Cell -Proteins, Enzymes and Metabolism (26GNTD872)

Introduction to Functional Genomics (26GNTD881)

Teratology (35GC860)

Additional elective courses can be found in the UC College of Medicine Course Directory.

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

## 2. Molecular and Developmental Biology Journal Club

Responsibility for organizing Journal Club resides with the Graduate Student Representative. During autumn and winter quarters, Journal Club is to be led by a faculty member in the Graduate Program in Molecular and Developmental Biology and during spring quarter by graduate students. The Graduate Student Representative will indicate to the Director of the Program 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 quarter when they are expected to provide leadership for the group.

## 3. Lab Rotation

Three laboratory rotations of one quarter each are recommended. Students are encouraged to complete one or two of the required laboratory rotations during the summer prior to fall quarter 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. During the summer, a rotation involved approximately 40 hours per week for approximately 5 weeks. During an academic quarter, a rotation involves approximately 20 hours per week for approximately 10 weeks. Quarters vary slightly in length, but the rotation involves the entire quarter. Hours per week may vary with the approval of the faculty advisor.

## 4. Seminars

All students in their third, fourth and fifth year present their work at the annual MDB Program Retreat. Presentations take the form of oral presentations or

posters. Second year students have the option to present a poster of their preliminary studies.

C. Requirements for the Ph.D. degree in the Molecular and Developmental Biology Graduate Program for student in the PSTP combined M.D./Ph.D. program

1. Satisfy course requirements as determined by the Initial Advisory Committee. The biochemistry course taken in the M.D. program will substitute for the Molecular Biology of the Cell I, Introductory Molecular Genetics, and Molecular Biology of the Cell II. All students will be required to complete 45 graduate credit hours and it is suggested that students take the Developmental Biology core courses, Advanced Molecular Genetics I and II. The Teratology course and additional courses for the teratology track will be required for those students electing this program. The remainder of the didactic courses to be taken will be decided on an individual basis.
2. M.D./Ph.D. students must begin their candidacy exam before the end of the winter quarter in the second year of their Ph.D. training.
3. All other requirements will be the same as for the Doctor of Philosophy Degree.

D. Requirements for the Master's Degree

1. Overview of Requirements

- a. Establish a Thesis Research Committee consisting of at least three members: the advisor and at least two other members of the Molecular and Developmental Biology faculty.
- b. Completion of a research project that is written and/or published in a peer reviewed journal and defended orally before the committee. 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 45 graduate credit hours.
- e. Pick up Master's Degree packet in the Graduate Office.

- 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. 2 bound copies of thesis to the Division of Research and Advanced Studies (paid by student) or an electronic thesis delivered in the form specified by Research and Advanced Studies.

Submit one bound copy to Advisor (paid by Program) or an electronic version identical to that submitted to Research and Advanced Studies.

Submit one bound copy to Molecular and Developmental Biology Program (CHRF-Room 3014; paid by program) or an electronic version identical to that submitted to Research and Advanced Studies.

Additional copies will be paid by student.

- j. Submit receipt for payment of the binding fee (paid at Cashier's Office) if submitting hardbound copies.
- k. All IP and I grades must be removed.
- l. Fill out form for conferral of the degree *in absentia* (if applicable).
- m. Complete formal application for degree form and alumni office record.

## 2. Initial Advisory Committee

This role of this committee is described in detail in Section H.4.

## 3. Research Advisor

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

## 4. Thesis Research Committee

The composition of the Thesis Research 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 Thesis Research 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 Research 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.

#### 5. 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 45 graduate credits and research thesis completed to the satisfaction of the candidate's Thesis Research 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.

### IV. GRADUATE CREDITS AND GRADING PRACTICES

#### A. Course Load

1. Students should register for at least 12 credits for Autumn, Winter, and Spring Quarters exclusive of audit credits.
2. Graduate Research Assistants who are over 200 credits should register for one credit in the Autumn Quarter.
3. Part time status is not permitted under any circumstances.
4. Except in unusual circumstances, no outside work is permitted by the students. Exceptions require written permission of the program.

#### B. Graduate Assistants and University Graduate Scholarship Recipients

Students receiving Graduate Assistantships or University Graduate Scholarships must carry a full-time course load (12 credits or more) each quarter exclusive of audit credits. Under ordinary circumstances, assistantships and tuition scholarships will not be awarded to students who have accumulated 260 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 of training. The workload requirements of students who hold assistantships are determined by the program but they are generally expected to provide between 17-19 hours per week in departmental service. In addition, they must register for a minimum of 12 graduate credit hours each quarter. Thus, when these students are employed over and above

their assistantships a number of legitimate academic concerns can be raised (including length of time to earn their degrees). The following policy recommendations are to be followed:

1. One course per quarter (or the equivalent FTE% for non-instructional assignments) is the maximum part-time workload allowable for those who have a graduate assistantship.
2. The Program will closely monitor the academic progress of students holding more than one University appointment/employment. This should include quarterly grade reports and a progress report for each student's file.
3. Continued academic progress is expected; should progress slow, the additional appointment should be terminated.

#### C. Graduate Credit in 500, 600, and 700 Level Courses

A graduate student who is registered in 500, 600, or 700 level courses carrying both undergraduate and graduate credit may be required to complete a certain amount of academic work in addition to that required of undergraduates in the same course. The extra work may consist of reading and reviewing additional books, presenting reports, or doing such supplementary work as the instructor in charge of the course deems advisable.

#### D. Grading Practices

At the end of each quarter, the Office of Student Records mails to each student an official report of academic achievement. Reports are rendered in the form of grades which should be interpreted as follows:

A Excellent work; i.e., work of outstanding character;

A-

B+

B Work of good quality, commendable but not outstanding;

B-

C+

C Work of acceptable but not distinguished quality;

F Unsatisfactory work for graduate credit. Graduation with F on the transcript will be permitted only if:

1. The student meets published Program or college standards for the degree program, and
2. a grade of F in a required course is superseded by a grade of C or better in the same course retaken by the student.

P Pass

U Unsatisfactory work; may only be used for non-credit (audited) graduate course

I Incomplete

1. The I grade is awarded only when the student fails to complete one or more course requirements, such as the final examination or a paper or project.
2. The I grade should not be used when an F or NG grade would be more appropriate.
3. Conversion of I Grades:
  - a. A grade of I will automatically be converted to an F one calendar year after the initial grade was given. Normal appeal channels are open to students documenting hardship cases.
  - b. Graduation will not be permitted if a student has a grade of I on the transcript. Course work must be completed or the grade will be changed to an F.

W Official withdrawal: Indicates that the student or Professor processed a drop or official withdrawal from a course for which he/she was registered. Students who drop courses through the first three weeks of the quarter will have the courses deleted from their schedules and they will not appear on the permanent academic record. Thereafter, students dropping courses must obtain the professors' signatures and grades (W or F) on add/drop forms. No drops will be accepted after the eighth week of classes for the quarter.

T The audit option is intended for the student who desires, or is advised, to do work in a course in which a grade is deemed unnecessary by the student in consultation with the student's advisor or program. Admissions and conditions for participation in audit courses are at the discretion of the instructor.

1. Registration for audit may be utilized in deficiency/remedial registrations in the major area and may be utilized in elective registrations outside the major area.

2. It is recommended that there be a maximum audit registration of one course per quarter.
3. The T grade should denote (at the minimum) that a student has regularly attended the course.

IP In Progress

NG No grade reported

1. The NG grade should be limited to the following situations and not be used as a substitute for the grade of I:
  - i) Thesis/dissertation, research, projects and multi-quarter seminars in which no basis of evaluation existed or was required by the time grades were due for that quarter.
  - ii) Internships
2. Programs or colleges are encouraged to prepare published listings of those courses for which NG grades are applicable.
3. The NG grade should not be used as a final grade in normal lecture courses.
4. In those situations in which a professor is prevented from awarding a grade, for any reason, a grade of the N will be given. This would specifically cover cases of academic misconduct still under consideration -- two quarter limit.
5. Normally an NG grade should be removed prior to graduation. Programs or colleges, however, may allow a student to graduate with the NG grade when such action is deemed appropriate.

## V. REGISTRATION

### A. Registration Change Procedure (Add/Drop)

Once a student has completed registration, the official record can be changed only with a registration change form secured from the student's college office or program, to be used only when changes in a program are absolutely necessary. There is no charge to process an add/drop transaction. Such changes must be processed through the Office of Registration and Scheduling by Friday of the second week of classes, unless the college offering the course has established an earlier deadline. After Friday of the second week of the quarter, only withdrawals or drops of courses will be accepted.

## B. 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. Admissions and conditions for participation in audit courses are at the discretion of the instructor, who is not obligated to accept a student for audit.

Graduate students generally register to audit a course to obtain remedial/deficiency instruction in major or minor areas of their programs of study.

Audit hours do not count toward the 260 credit hour limit (as a condition of eligibility for financial assistance), nor are they included in the determination of full-time status. Such hours may be charged to a tuition scholarship only if at least 12 graduate credits are taken that same quarter and if the total is less than 19 credits. Also, no more than one audit course per quarter should be charged to a tuition scholarship.

## C. Pass/Fail

With the approval of both the Director of Graduate Studies and the instructor, a graduate student may take any course on a Pass/Fail basis, but no instructor is obligated to accept a student on a Pass/Fail basis.

## D. Withdrawals

### 1. Academic Considerations

A student may drop a course by Saturday of the third week of classes with no academic penalty. From the fourth through the eighth week, a student may drop a course with a grade of either "W" or "F" to be assigned at the discretion of the instructor. After Saturday of the eighth week no withdrawal will be approved, except for reasons beyond the control of the student, such as sickness or accident. The appropriate graduate office judges the advisability of such exceptions. All withdrawals must be made through the graduate office either in person or by letter. A student may be withdrawn by the instructor at any time in the quarter when excessive absences have been incurred. A student withdrawn because of excessive absences is not eligible for academic credit, refund of fees, or reinstatement as an auditor in that course.

### 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. The withdrawal date to be used in determining refund eligibility shall be the date the official request is submitted for approval to the Dean of the

college in which the student is enrolled. Students who officially withdraw from classes for any reason shall receive refunds of instructional fees, general fees, and non-resident surcharges on the basis of the following schedule:

Prior to first day of class .....	100%
First week .....	100%
Second week .....	80% less \$100
Third week .....	70% less \$100
Fourth week .....	60% less \$100
Fifth week .....	50% less \$100
Sixth week .....	40% less \$100
After sixth week .....	0%

Similar proportionate adjustments are made for summer session three-and-one-third week terms and for other short-term courses, based on the length of the program. 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.

For the purpose of refunds, the first week of the quarter is defined as beginning on the day following the end of the regular registration period and ending at 11:00 a.m. on the Saturday of the week in which classes begin. The following Saturdays are then counted sequentially as ending the second and third weeks of the quarter.

In an academic quarter in which the official first day of classes begins on a day other than Monday, a first week refund of 100% cash is authorized for a student withdrawing after the first regularly scheduled class meeting and before the eighth calendar day of the quarter.

Any outstanding financial obligation to the University will be deducted from a cash refund until all such obligations have been discharged. 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.

## VI. ADMINISTRATION OF PROGRAM

### A. Role of Director of 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 Director of the Program is elected for a three year term.

#### B. Role of Director of Graduate Studies

The Director of 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 probationary or terminal status. The Director of Graduate Studies is the chairperson of the Initial Advisory. The Director of Graduate Studies is elected for a three year term.

#### C. Role of Director of Admissions

The Director of 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, arranging financial support for incoming students and updating and maintaining recruitment material. The Director of Admissions is the chairperson of the Admission Committee. The Director of Admissions will be appointed by the Director of the Program for a three year term.

#### D. Graduate Student Representatives

The Graduate Student Representative, who is an elected representative of the graduate students in the Program, is invited to attend all faculty meetings with full voting power, excepting that this representative not be involved in discussions or decisions dealing with individual students in the Program. The representative has the responsibility to bring concerns of the graduate students to the attention of the faculty. The Graduate Student Representative (along with the Vice-Graduate Student Representative) is responsible for attending meetings of the Organization of Health Science Graduate Students (OHS GS).

A vice-student representative will also be elected by the graduate students in the program and is responsible for attending OHS GS meetings, arranging the student invited seminar speaker(s) and assuming the responsibilities of the Graduate Student Representative when needed.

A Lunch Coordinator will be elected by the students in the Program and will be responsible for arranging lunches with seminar speakers and prospective students.

#### E. Election of Officers

The Director of the Program and the Director of Graduate Studies are each elected for 3 year terms. Nominations will be solicited prior to and at the faculty meeting that precedes elections. Election shall be effected by a simple majority of the members present at the faculty meeting who constitute a quorum, consisting of one third (1/3) of the faculty. Officers may be re-elected.

#### F. Role of Seminar Coordinator

The Seminar Coordinator is responsible for arranging internal and outside speakers for the weekly Molecular and Developmental Biology Seminar Series and for organizing the yearly Graduate Student Symposium. In addition, the seminar coordinator will be responsible for monitoring student attendance at the weekly seminars and for providing student grades in the Molecular and Developmental Biology Seminar at the end of each quarter (Fall, Winter and Spring). The Seminar Coordinator will be a member of the faculty in the Molecular and Developmental Biology Graduate Program and will be appointed by the Director of the Program.

#### G. Role of Developmental Biology Course Coordinator

The Developmental Biology Course Coordinator is responsible for organizing the Developmental Biology Course and for grading students. The course coordinator will be appointed by the Director of the Program from the faculty in the Molecular and Developmental Biology Graduate Program.

#### H. Standing Committees

##### 1. Membership Committee

The membership committee is responsible for evaluating the applications for faculty membership in the program, for evaluating faculty reappointments to the program yearly and for making recommendations to the faculty with regard to new appointments and reappointments to the program. This committee is appointed by the Director of the Program. Individual committee members will be appointed for overlapping 3 year terms.

##### 2. Grievance Committee

The grievance committee is responsible for dealing with student grievances according to University policy as described elsewhere in these program guidelines. The committee is appointed by the Director of the Program.

### 3. Admissions Committee

The Admissions Committee is responsible for selecting graduate students for admission to the Program in Molecular and Developmental Biology. Members of the committee will consist of the Directors of Admissions (chairperson), the Director of Graduate Studies, and at least two other faculty members in the Molecular and Developmental Biology Program appointed by the Director of the Program for three year terms.

### 4. Initial Advisory Committee

The Initial Advisory Committee will be responsible for the guidance of first year graduate students in the Molecular and Developmental Biology Graduate Program in consultation with the Director of Graduate Studies. This Committee will consist of the Director of Graduate Studies (chairperson), the Director of Admissions, and at least two other faculty members in the Molecular and Developmental Biology Program appointed by the Director of the Program for three year terms beginning in the summer.

## I. Role of Administrative Support Staff

The Molecular and Developmental Biology Graduate Program is based in the Division of Developmental Biology at the Children's Hospital Research Foundation. The administrative support staff are employees of the Division of Developmental Biology with a portion of their duties being devoted to the Program.

The Business Manager is responsible for the supervision of all administrative and budgetary activities related to the Program including supervision and training of clerical personnel. The Business Manager also advises officers on administrative aspects of the Program, coordinates Program activities within the Division, and attends faculty meetings.

The Service Coordinator is the main contact person for the Program. This 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. Questions or concerns related to the Program should first be brought to this individual's attention who will forward them to the appropriate individual. The Service Coordinator is also responsible for developing and updating a procedure manual for activities related to the Molecular and Developmental Biology Graduate Program. This individual attends the Program's faculty meetings and prepares minutes.

## J. Itemized Responsibilities of Program Officers

### 1. Director of the Program

- a. Has overall responsibility for the Molecular and Developmental Biology Graduate Program.
- b. Oversees administration of the Program.
- c. Runs the quarterly faculty meeting.
- d. Is responsible for budget decisions and oversees the budget.
- e. Works with Director of Graduate Studies on overall operation of Program.
- f. Meets with student candidates to the program.
- g. Meets with scientific advisors and reviewers of the Program.
- h. Appoints committees as needed.

### 2. Director of Graduate Studies

- a. Advises graduate students with regard to progress both in classes and in the lab.
- b. Monitors students performance in classes.
- c. Reports on student's progress to the faculty.
- d. Signs off on evaluations of student committee meetings.
- e. Is chairperson of Initial Advisory Committee.
- f. Is responsible for selection of applicants for Ryan Fellowship.
- g. Works with the Director of the Program on overall operation of the program.
- h. Interacts with the Dean's office regarding student related matters.
- i. Receives all University of Cincinnati related information pertaining to graduate programs

### 3. Director of Admissions

- a. Has authority to offer letters of acceptance to prospective students.
- b. Arranges interviews with perspective students.
- c. Chairperson of Admissions Committee.

### 4. Director of Recruitment

- a. Is responsible for advertising the program to prospective students.
- b. Is responsible for recruitment brochures.
- c. Is responsible for coordinating recruitment efforts with the University.
- d. Works with the Executive Secretary responsible for budgetary concerns on recruitment admissions budget.
- e. Chairperson of Recruitment Committee.

5. Graduate Student Representative
  - a. Is a member of the Organization of Health Science Graduate Students (OHSGS) as representative of the graduate students in the Molecular and Developmental Biology Program.
  - b. Is responsible for making sure that the Journal Club for first and second year students is organized appropriately.
  - c. Is responsible for reporting on student attendance at Journal Clubs and the Molecular and Developmental Biology Seminar series.
  - d. Represents the program at recruitment and science fairs when appropriate.
  - e. Organizes meetings with graduate students.
  - f. Attends quarterly faculty meetings
  
6. Seminar Coordinator
  - a. Arranges internal and outside speakers for Molecular and Developmental Biology Seminars Series.
  - b. Organizes Graduate Student Symposium.
  - c. Is responsible for monitoring student attendance at seminars.
  - d. Is responsible for students grade in the seminar course.
  - e. Works with the Executive Secretary responsible for budgetary concerns on budgetary matters with regard to the seminar series and the symposium.

## 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, handicap or age will not

be practiced in any of its activities. Complaints involving the abridgement of this policy should be addressed to the Affirmative Action Coordinator.

### C. Right to Review Records

Students, once enrolled, have the right to review their educational records, except for those excluded by law, such as records maintained by a physician or psychiatrist, or parents' financial statement. Educational records are maintained in such offices as Student Records, the different College Deans' Offices, program offices, Student Financial Aid, Career Development and Placement, and Educational Advising.

In order to gain a review of such records, along with any appropriate explanation or interpretation, the student should first address the proper university, collegiate, or Program office. Should the student encounter any difficulty in obtaining a review of the student record they may appeal to the Family Educational Rights and Privacy Act Committee. It is the policy of the University of Cincinnati that the kinds of student records referred to in this statement may be reviewed by any qualified student at any reasonable time. Copies of any portion of the record will be provided at cost, except transcripts of students' permanent academic records for which the University's transcript policy will apply.

It is the policy of this institution that all student records, other than "Director Information," are to be treated with confidentiality so that the only access afforded University faculty or staff is on a "need-to-know" basis. The office responsible for the maintenance of any particular student record will be responsible for seeing to it that such confidentiality is maintained.

The University considers the following information as Director Information:

The student's name, address, telephone number, college, class, major field of study, dates of attendance, registration status, and degrees and awards received.

### 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:

- a. 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.
- b. To the college dean 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.
- c. To the University Graduate Dean for grievances against faculty members in two or more colleges or a university-wide agency.

Program Review: Within one academic calendar week after the program director 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 Honesty

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.

#### F. Academic Misconduct

The University has established formal procedures to deal with cases of alleged academic misconduct which 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 officers of the program, the grievance officer, the Initial Advisory Committee, 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 grievance officer, who 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).

## G. Sexual Harassment

Sexual harassment is forbidden by law and University policy. 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, the grievance officer, 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.

## H. Maternity/Paternity Leave Policy

Students in the Molecular Developmental Biology Program will be paid for no more than six weeks of maternity/paternity leave unless there are extenuating circumstances as deemed by the student's physician, advisor, and the Director of the Program. All time off must be approved by the student's advisor and the Director of the Program prior to the beginning of the leave. Additional time off may be taken without pay upon approval by the student's advisor and the Director of the Program.

# 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 thesis or dissertation 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 Associate faculty. Faculty with either appointment will have equal voting privileges. It should be noted that students and trainees may select an advisor who was on the training faculty at the time of their entrance into the Program.

#### B. Nomination and acceptance procedures for New Training Faculty.

To meet the above stated goals, the following processes for consideration of Training faculty affiliation 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 have a legitimate interest in Molecular and Developmental Biology.
- (3) The candidate should be willing to assume teaching, administrative, and related responsibilities within the Program.
- (4) 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.
- (5) The funding source for students may not impose any restrictions or limitations on the ability of the student to publish their research findings.
- (6) 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.
- (7) Prospective MDB faculty should have established strong research productivity as indicated by first and/or last author publications.
- (8) Prospective MDB Faculty members should be nominated only by their Division Directors or Department Chairs.
- (9) MBD faculty members are required to have current and complete information on the MDB Website
- (10) The MDB membership committee will consist of Division Directors with Faculty in the MDB Program.

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 the Faculty Membership Committee of three members of the Graduate Program. Applications for admission to the Program will be accepted only upon invitation from this Committee. The application should include a supporting letter of nomination from a Faculty member in the Program and 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 curriculum vitae, a summary of past research, graduate student training, and teaching experience and (4) a history of present and past research support. This information will be provided to the Faculty as a whole and the application will usually be voted on usually at the spring faculty meeting.

### C. Reappointment of Current Training Faculty

All Faculty members in the Graduate Program have appointments of 4 years, after which time a Faculty Membership Committee of three, 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.