1. The Department

The Department of Cell & Developmental Biology (CDB) faculty together with the Graduate College have established the requirements necessary to achieve the Doctor of Philosophy (Ph.D.) degree in our program. As you are developing your research and teaching skills, we expect that you, together with your faculty thesis advisor and Thesis Committee Members, will take responsibility for achieving the goals of the graduate program. Success depends on reaching the Graduate Degree Milestones and completing degree requirements in a timely manner.

Laura Martin manages the department office and she is also the graduate program contact. Kathryn Dewitt assists Laura. Their offices are located in Room B107 CLSL. They will assist you with any registration, payroll or other administrative matters. Kathryn will also handle your departmental reimbursements and travel arrangements. The School of Molecular and Cellular Biology (MCB) administrative office is located in Room 393 Morrill Hall. Their role is to assist you in business matters, such as purchase orders for research supplies and externally-funded fellowships.

The CDB Graduate Program Committee, composed of CDB faculty members with Professor Jie Chen as the chair, handles all matters concerning students’ progress in the program. Professor Supriya Prasanth, the Head of the Department, and Professor Rachel Smith-Bolton, the Associate Head of the Department, are also available to discuss any academic or research problems with students, if necessary.

Should a student decide to leave his/her current thesis lab at any point for any reason, he/she must immediately meet with Laura Martin to discuss the implications. A mandatory meeting with the Graduate College, and ISSS if the student is an international student, will be scheduled to fully understand the student’s options.

2. Degree Requirements

2.1 Ph.D. Degree Requirements

Candidates for the Ph.D. degree must complete the following.

**Graduate College Requirements:**

- Completion of at least 96 credit hours of work beyond the baccalaureate degree.
- Submission of an acceptable thesis.
- All requirements for the Ph.D. must be completed within 7 years after initial registration in the Graduate College. Petition to extend this time-to-degree **may** be approved by the department and the Graduate College for up to 12 months.
- If the Ph.D. is not completed within 5 years after the Preliminary Examination, the student will be required to take a second Preliminary Examination. Please see the Graduate College Handbook for more details ([http://www.grad.illinois.edu/gradhandbook/](http://www.grad.illinois.edu/gradhandbook/)).

**Cell & Developmental Biology Department Requirements:**

The CDB Graduate Program Committee evaluates factors that determine satisfactory academic progress. Failure to meet these requirements can result in the committee recommending to the Graduate College that the student be placed on probation or dismissed from the Graduate College. In particular, a student who fails to meet CDB Graduate Program Milestones in a timely fashion will be put on a departmental or
Graduate College hold. This means that the student will not be given a research appointment (will not be paid) until the deficiency is corrected.

- Successful completion of the course requirements set by the Department of CDB, total of 100 credit hours – see Sections 4 & 5.
- An overall grade point average (GPA) of at least 3.0 in all graded 400- and 500-level courses.
- Passing grade on the Preliminary Examination, held during April of the second year. Under special circumstances the exam period may be extended into March and May dates. This examination is designed to determine if the student is qualified for advancement to a Ph.D. degree.
- Form a Thesis Committee by the first day of the spring semester of the third year.
- After successful completion of the Preliminary Exam, present a Departmental Student Research Seminar each academic year. The Seminar will be coupled to an Annual Meeting of the Thesis Committee to review the student’s progress. In preparation for this meeting, the student and advisor will complete the annual review form to be submitted to the committee.
- Experience teaching for at least one semester (one semester of 50% TA or the equivalent). International CDB graduate students must be eligible to teach within 3 years of entering the graduate program. Students who are not eligible to teach within this time period are in poor academic standing and will be dismissed from the Ph.D. program unless special approval is granted by the graduate committee before the start of the third year.
- All students are required to publish significant findings of their primary thesis research, as a first author, in peer-reviewed journals.
- Attend at least one national scientific meeting in their chosen field, and present a first-authored poster or talk at that conference. It is expected that the advisor’s research funding will support this travel. However, if no source of funding is available, students in their fourth year or beyond who have not yet attended a meeting may receive full support from the Department to attend one national meeting.

To be eligible for departmental support each student must:

- Demonstrate that he or she has applied for external funding for this travel; for example most conferences do offer student travel awards.
- Have been accepted to the meeting as a presenter of a first-author poster or talk.
- Provide a letter from his or her advisor describing the benefits of attending that particular meeting and the need for departmental financial support.

In addition, CDB will match any external travel award obtained by a student for national conference travel at any stage in his or her graduate career, up to a total of $500. Students who are selected to present a talk at a national conference will be eligible for an additional award and departmental recognition. A student may receive unlimited departmental awards in this category throughout his/her graduate career, but the presentations must be on different scientific projects.

- Hold a pre-defense meeting with the Thesis Committee to evaluate student progress approximately six months prior to the date of the final thesis defense.
This meeting can take place in conjunction with the student’s required annual oral presentation and meeting with the thesis committee.

- Submission and successful defense of a dissertation prepared on original research, performed under the direction of a faculty member or an Affiliate of the CDB Department. The dissertation must be submitted to the thesis committee at least two weeks prior to the date of defense. Defense will be held with the committee only. Upon passing the defense, a public seminar presentation of the student’s thesis work will be scheduled at an earliest possible date, preferably in a Monday or Wednesday departmental seminar slot. The Department will approve the dissertation only after the public seminar. See sections “Ph.D. Thesis (Dissertation)” Section 11.2 and “Thesis Defense (Final Examination)” Section 11.3.

3. Advising

All students are admitted into the School of MCB umbrella program. The first semester, the Associate Director of the MCB graduate program, Jim Imlay, will serve as the primary advisor. When the student becomes a member of CDB the student’s PI will be the primary advisor and the first point of contact when he/she seeks advice or assistance with issues relating to the graduate program. Students should also feel free to bring up problems or concerns about their progression in the program with the Graduate Program Committee, the Associate Head, or the Head of the Department.

4. The First Semester of Graduate School

Coursework

During the first semester of the first year of graduate school, all students are School of MCB graduate students. As such, they take the MCB core graduate courses:

- MCB 501 - Advanced Biochemistry (4 hrs)
- MCB 502 - Advanced Molecular Genetics (4 hrs)

The students also register for lab rotations

- MCB 581 - 1st rotation (3 hrs)
- MCB 582 - 2nd rotation (3 hrs)
- MCB 583 - 3rd rotation (3 hrs)

Thus, for the first semester of the first year of graduate school, the student will be enrolled for a total of 17 credit hours. Lab rotations are graded on an S/U basis.

5. Coursework in the Second Semester and Beyond

Each student is required to register for a full-time credit load including summer until CDB program requirements are completed. To obtain a Ph.D. degree a student must complete 100 hours of graduate credit, of which 20 hours must be graded formal coursework. Eight (8) of the required 20 graded hours of coursework will have already been taken in the first semester (MCB501, MCB502), leaving 12 credit hours to be completed once a student joins CDB.

All coursework must be discussed and agreed upon between the advisor and the student, whether or not the coursework is a part of the program requirement.
Specific requirements:

- **MCB 580 - Research Ethics and Responsibilities (1 hr, S/U).**
  This class must be taken in the fall semester of the second year.

- **CDB 595 A & C - Department and Graduate Student Seminar (6 hrs, S/U).**
  *These credits are only counted toward the 100 hour total *prior* to completing the Preliminary Exam.* Students are required to register for one credit hour of each of the CDB seminars every fall and spring semester that they register. Students must attend a minimum of 75% of the seminars for both CDB 595 A & C to get a “Satisfactory” grade. Two cumulative “Unsatisfactory” grades in either or both of these courses will be considered not meeting the graduate program requirements and therefore will put the student in poor academic standing.

- **CDB 590/599 - Thesis Research (64 hrs S/U)**
  Students should register for CDB 590 before they pass their Preliminary Examination and CDB 599 after they pass the prelim exam.

- **MCB 540 (Scientific Writing, 2 hrs, graded).** This class must be taken in the fall semester of the second year.

- **Elective courses (10 graded hours total)**
  May be chosen from any MCB courses at 400 level or above; at least 3 of the courses must be taught or co-taught by CDB faculty.
  Occasionally, classes taken outside of MCB fulfill a niche that cannot be accommodated by an MCB course. In order for such courses to be counted toward the program requirement, they must be agreed upon by your advisor and must also be approved by the CDB Graduate Program Committee.

Number of hours per semester:

- Students who are employed as TAs need to register for 14 credit hours of research and courses combined.
- Students who are employed as RAs need to register for 16 credit hours of research and courses combined.
- 6 credit hours for summer research, regardless of the mechanism that the student is supported by.
- International students may be advised to take a reduced load during a semester when they are enrolled in a remedial English course (ESL).
- The credit hours needed after signing up for courses should be assigned to CDB 590 or CDB 599, as appropriate.

These hours may vary if a student is on a fellowship. Please contact Laura Martin, if you have questions.

## 6. Teaching

### 6.1 Requirements

Becoming a proficient teacher is an important part of graduate education. The department requires each graduate student to teach the equivalent of 50% for one semester. Non-native English speaking CDB graduate students must be eligible to teach within 3 years of their entering the graduate program. Ph.D. candidates who are not eligible to teach within this time period may be dismissed from the Ph.D. program.
6.2 UIUC Teaching Assistant English Language Proficiency Requirements
Illinois state law requires that all instructors at the University of Illinois be orally proficient in English to be eligible to teach. All non-native English speaking students applying for appointments as teaching assistants at UIUC must first satisfy the English proficiency admission requirements of the Graduate College and the appointing academic unit.

6.3 The EPI (English Proficiency Interview)
All non-native speakers of English who scored below 24 in TOEFL iBT speaking test and wish to provide classroom instruction are required to pass the EPI with a score of 4CP, 5 or 6. There are no exceptions.

- If the student earns a 5 or 6, the student is eligible to TA.
- If the student receives a 4CP grade, the student is required to successfully complete “ESL 508: Seminar for International TAs” during or before the first semester of teaching.
- If the student earns a score of 4, 3 or 2, the student may retake the test after successful completion of an English improvement activity. Students have a maximum of 3 attempts.
- Not passing the EPI is grounds for dismissal from the department.

7. Preliminary Examination
The Preliminary Exam is required by the Graduate College to determine if the student is qualified for advancement to candidacy for the Ph.D. degree. This examination consists of two parts: a written proposal and an oral defense, to be completed in April of the student’s second year.

7.1 Preliminary Exam Committee
The CDB Graduate Program Committee oversees the administering of Prelim Exams for all students. Each prelim exam committee consists of four faculty members, including 3 CDB faculty members assigned by the Graduate Program Committee and 1 faculty member from outside the Department chosen by the student. Members of the Graduate Program Committee serve as chairs of the prelim exam committees. The committees are formed in January for April exams.

7.2 Preliminary Exam Written Proposal
The student must prepare a research proposal describing his or her thesis project. It is the student’s responsibility to write his/her own proposal. However, the advisor must read drafts of these documents and provide both intellectual guidance and editorial feedback to help the students learn how to undertake good scientific writing.

The written proposal should be no longer than 7 pages in length (excluding the cover page and references). The written proposal must be submitted to the CDB Office by March 15 of the second year in the graduate program. No revision of the proposal will be accepted by the office or by the committee after this date. The format of the written proposal must follow guidelines below and will be checked by the CDB Office prior to distributing to prelim exam committee members.

The format of the written proposal will follow that of the NIH F31 pre-doctoral fellowship application, which specifically includes the Specific Aims and Research Strategy sections. The guidelines for those sections are listed below, and come from NIH publication PHS SF424 (R&R), with a few comments added for clarity.
These websites may help get you started:
https://depts.washington.edu/anesth/research/grantsmanship/session3_WritingEffectiveSpecificAims.pdf

For fonts use Arial, Helvetica, Palatino Linotype, or Georgia typeface, a black font color, and a font size of 11 points or larger. (A Symbol font may be used to insert Greek letters or special characters; the font size requirement still applies).

Type density, including characters and spaces, must be no more than 15 characters per inch. Type may be no more than six lines per inch.

Use standard paper size (8 ½”x11”). Use at least one-half inch margins (top, bottom, left and right) for all pages. No information should appear in the margins.

Proposal Sections:

Cover Page: The cover page should include the title of the project, your name, the date, time and place of the oral defense, and list the members of the Exam Committee with the designated Chair indicated.

Specific Aims (limited to one page): State the goals of the proposed research and summarize the expected outcome(s), including the impact that the results of the proposed research will exert on the research field(s) involved. This section outlines the objectives and describes concisely what the specific research described in the proposal is intended to accomplish and a hypotheses to be treated. This page will typically include an introductory paragraph or two that concisely states the scientific problem and hypothesis, followed by a numbered list of 2-3 Specific Aims designed to address that hypothesis. A short but concise description of each Aim should be included after a title that accurately summarizes the Aim.

Research Strategy (limited to 6 pages including all figures and tables): Organize the Research Strategy in the specified order and start each section with the appropriate section heading:

Significance

Innovation

Approach (and alternative approaches)

Cite published experimental details in the Research Strategy and provide the full reference in the References Cited section.

(a) Significance:

• Explain the importance of the problem or critical barrier to progress in the field that the proposed project addresses.

• Explain how the proposed project will improve scientific knowledge, technical capability, and/or clinical practice in one or more broad fields.

• Describe how the concepts, methods, technologies, treatments, services, or preventative interventions that drive this field will be changed if the proposed aims are achieved.

(b) Innovation: (the Innovation section is optional, but can be used to help your committee members understand how your project will yield novel insights or develop novel approaches that will advance your chosen field.)
• Explain how the application challenges and seeks to shift current research or clinical practice paradigms.

• Describe any novel theoretical concepts, approaches or methodologies, instrumentation or interventions to be developed or used, and any advantage over existing methodologies, instrumentation, or interventions.

• Explain any refinements, improvements, or new applications of theoretical concepts, approaches or methodologies, instrumentation, or interventions.

(c) **Approach:** This section should include the background necessary for a reader to understand the problem you wish to solve, and to understand the basis for your hypothesis. The section should include:

- A review of the scientific literature sufficient to inform your committee of the relevant issues and unsolved problems that lead to your hypothesis

- Preliminary Data that support your hypothesis (please be sure to give proper attribution if the data presented are not your own)

- A section that describes the approach – both experimental and analytical - that you will use to attain each of your Specific Aims.

You need to convince your committee that the experiments you plan can be completed in time span consistent with a Ph.D. thesis studentship, that is, within the next 3-4 years.

For each Aim it is essential to identify potential issues that might arise in the course of the experiments you propose and alternative approaches (methods or strategies) you could use in case your favored strategy were to fail. You should also be prepared to discuss alternative hypotheses and state how you might change your strategy if results indicate that your original hypothesis is incorrect.

From the NIH manual:

- Describe the overall strategy, methodology, and analyses to be used to accomplish the specific aims of the project. Include how the data will be collected, analyzed, and interpreted.

- Discuss potential problems, alternative strategies, and benchmarks for success anticipated to achieve the aims.

- If the project is in the early stages of development, describe any strategy to establish feasibility, and address the management of any high risk aspects of the proposed work.

- If an applicant has multiple Specific Aims, then the applicant should address Significance, Innovation and Approach for each Specific Aim individually. For the CDB exam this should be brief and in addition to the overall project significance section, described above. You should also incorporate information on any of your Preliminary Studies that pertain to each Specific Aim within the Significance and Approach subsections, where this is best suited.

**References cited** *(No page limits):* This section provides full literature references, following the standard format, which includes the authors’ names (in the correct order, as published), year of publication, title of the manuscript, title of the journal in which the work was published, volume and page numbers.
7.3 Preliminary Exam Oral Defense

The oral defense will be scheduled for two hours. The student should plan a presentation for no more than 20 uninterrupted minutes (although the student may indeed be interrupted with questions during the presentation) with **15 slides maximum** of the proposal.

During the oral defense, the student must be able to describe clearly the rationale for the experiments, to summarize preliminary results, and to defend conclusions based on this work. The student should be prepared to explain all aspects of the project, including other studies relevant to the proposed research (i.e., relevant background and literature), all proposed experiments and techniques needed to undertake this research.

7.4 Preliminary Exam Evaluation and Outcome

On the basis of the written proposal and the oral presentation, the committee will evaluate the student’s progress and potential to carry out Ph.D. degree-level research.

A formal checklist will be used to assist in the evaluation of the student’s performance at this exam. A copy of the blank checklist will be made available to the students early in the spring semester to help them prepare for the exam. The committee will evaluate the proposed research, the student’s background knowledge and grasp of any relevant material, as well as the student’s ability to communicate effectively and to think critically about his/her research project.

Following the meeting, the committee will meet with the student to explain their decision. The Chair will compose a letter of evaluation to the student and advisor **no later than two weeks following the examination.**

There are three potential outcomes of a Preliminary Examination:

- **Fail**: Students who fail will not be advanced to candidacy to the Ph.D. degree. They will be placed on probationary academic status, and must remediate the underlying conditions within one year. The student must retake and pass the entire Preliminary Examination within 12 months of the initial examination date according to University rules, or the student will be dismissed from the CDB graduate program.

- **Deferral**: For students who are deferred, the committee may recommend writing revisions, or revisions plus a new oral defense to be completed by the middle two weeks of the following September at the latest. A Preliminary Examination cannot be deferred twice and the outcome of a deferred exam is either “pass” or “fail.”

- **Pass**: Students who pass are advanced to candidacy to the Ph.D. degree.

7.5 Academic Probation

Students who are on academic probation (GPA<3.0) at the end of the fall semester of the second year may petition, with the support of their advisors, to take the Preliminary Examination in the following spring along with their classmates. If a student on academic probation fails the prelim exam, he/she will be immediately dismissed from the Ph.D. program. **Retake of the exam will not be allowed.**

All students **must** have a 3.0 GPA at the end of their third year or they will be dismissed from the Ph.D. program.
8. Ph.D. Thesis Committee

The Thesis Committee is established after successful completion of the Preliminary Exam. At any time, if necessary, it is possible to replace a member of the Thesis Committee, with permission from the CDB Graduate Program Committee.

Each student, in consultation with the thesis advisor and with the prior agreement of the faculty selected, will submit the names of three additional professors for the Thesis Committee to the CDB Graduate Program Committee no later than the start of the Spring semester of the third year. Three members of the committee, including the student’s advisor, must be primary CDB faculty members, at least two of the members must have attained tenure, and the fourth member must have a primary faculty appointment outside the department. **The student’s advisor is formally a member of the Ph.D. thesis committee.** With approval by the Graduate Program Committee, an additional member may be recruited to the committee - for example, to bring in new expertise as the project develops - as long as the above criteria have been met.

It is the student’s responsibility to ask potential committee members to serve on the committee. The student will forward to Laura Martin emails of faculty members confirming their willingness to serve. **The committee chair must be a tenured primary CDB member other than the thesis advisor. The student can suggest a chair (please provide justification), but the final decision will be made by the department.** The Graduate Program Committee will review and approve the prospective Thesis Committee. The Graduate Program Committee may also suggest an alternate member. The student must inform the outside member of his or her role on the Thesis Committee.

The Thesis Committee will meet yearly to evaluate the student’s progress and to provide advice. Each Ph.D. candidate will give an annual research seminar. All members of the committee, including the thesis advisor, are expected to attend the student’s seminar and a meeting each year, usually held immediately after the presentation, to provide feedback and advice to the candidate.

9. Graduate Student Annual Research and Academic Progress Review

Campus policy stipulates that graduate units must conduct annual academic progress reviews for all graduate students enrolled in degree-seeking programs at least once every academic year. A written copy of the review must be given to the student and be placed in the student’s academic file. The review must include: a student self-report and assessment; a written review prepared by the advisor; an opportunity for the student to discuss this review with the advisor in person.

This review will occur within the framework of the Department’s Preliminary Examinations and Annual Student Seminars:

**1st-year students**: An annual review form will be completed and signed by both the student and the advisor by May 15.

**2nd-year students**: The student’s written Preliminary Examination proposal and defense of the proposal, and the decision and summary statements by the exam committee serve as the review process. See Preliminary Examination Section 7 for details.

**All students, after completion of the Preliminary Examination (beginning 3rd-year)**: The student annual seminar and meeting with thesis committee serve as the review. See Graduate Student Annual Seminar and Progress Review Section 10 for details.
Meetings with 6th year and above students

The Graduate Program Committee will meet individually with each senior student in the spring of their 6th year and each following year as they remain in the program. The ultimate goal of the meeting is to help facilitate timely completion of the student’s PhD studies. This meeting would be above and beyond any scheduled annual meetings with the thesis committee, and would only include the student and graduate program committee faculty. Committee members will be asked to excuse themselves from meetings with their own students.

10. Graduate Student Annual Seminar and Progress Review

10.1 Overview of Annual Progress Review

Each year progress review will be performed for the Ph.D. candidate in his/her 3rd year or beyond. This review must be completed **no later than last day of spring semester (early May)**, which entails the following:

- The student will present a Departmental Research Seminar.
- An annual review form must be completed and signed by both the student and the advisor one week before the annual review meeting.
- If the student is in his/her 4th year or beyond and has not published a first-author manuscript, a manuscript draft or detailed outline of a paper in progress must be submitted to the Thesis Committee together with the annual review form. At a minimum the outline must contain a set of completed figures and an outline of planned figures with a detailed description of (1) the conclusions illustrated by completed figures, and (2) the question to be addressed by each figure planned.
- After the seminar the student will send the presentation slides electronically to the CDB Office.
- The student will meet with the Thesis Committee to discuss progress and future research directions. This meeting is generally scheduled for a time immediately following the annual seminar, but must take place within one month following the seminar.

10.2 Annual Student Seminar Presentation

The presentation should not exceed 20 minutes, followed by 10 minutes of Q&A. The advisor will serve as moderator to keep the seminar on time. In the absence of the advisor, chair of the student’s thesis committee will be the moderator. Each talk should include a focused synopsis of:

- Background, significance and rationale for the project (may include research question or hypothesis)
- Most informative results to date, emphasizing new experiments done and results collected over the past year
- Current interpretations and/or revised working model
- Future goals

Different time may be spent per section depending on career stage. For example, in Year 3, more time may be spent justifying or describing the project. By Year 6, more time should be spent on results and well-supported interpretations.
The purpose of these talks is to:

- Provide valuable experience for the student in developing and honing their public presentation skills
- Inform other students and faculty of the student’s research, and
- Allow the student to receive constructive input from the CDB community

The talks should be styled as if for a broad audience that is generally knowledgeable but not specifically expert in the student’s field. The student’s thesis committee is expected to attend this talk and evaluate the student’s progress as well as provide feedback to improve presentation skills. If the student has made progress on additional experiments or a second project, and they wish to share this information in a second ppt with the committee alone, that is fully supported. The committee will receive a copy of the student’s presentation from the previous year for comparison.

10.3 Annual Review Meeting

The annual review meeting should involve all committee members if possible. The Chair must be present, and the student’s advisor is also expected to attend.

The purpose of this meeting is to give committee members a chance to evaluate the student’s progress toward the degree. However, it is also a forum for students to gain valuable technical and scientific advice. The committee will have received the annual review form completed by the student and his/her advisor prior to this meeting.

10.4 Evaluation

The committee Chair will complete a form summarizing the committee’s evaluation of the candidate’s progress and approved by all committee members, no later than 2 weeks following the student’s meeting. The form will be submitted to the CDB Office and will be forwarded to the student and advisor.

The report will include the following components:

- Overall Assessment: of the student’s progress, seminar presentation, and written documents
- Strengths and Weaknesses: in concise summary
- Constructive advice on how to address any major concerns

An overall rating of “satisfactory” or “unsatisfactory” should be provided by the committee and included at the top of the report each year.

Satisfactory progress will be assigned to students who have:

- Met obligations regarding submission of required documents
- Provided adequate information to their committee, responded knowledgably to questions, and responded to concerns from previous years
- Made overall satisfactory progress (despite normal research setbacks and possible issues) toward their degree

 Unsatisfactory will be reserved to students who:

- Fail to submit their required documents, and fail to complete the meeting with their committee
11. The Final Year

11.1 Pre-defense or “6-Month” Meeting

Each student who is within a year of graduating is responsible for scheduling the pre-defense meeting with the Thesis Committee. The final defense cannot be scheduled until the student has the approval of the Thesis Committee and the Advisor at the pre-defense meeting.

Schedule a meeting with Laura Martin in the CDB Office, well in advance of scheduling your 6-month meeting, to make sure you have completed all the necessary requirements for a Ph.D. degree.

The advisor, as a member of the thesis committee, must attend the pre-defense meeting. This meeting provides an opportunity for the Committee to evaluate the student’s progress, suggest any additional experiments that may be necessary before completion of the thesis, and determine whether the expected time-frame for completion of the thesis is reasonable.

A week prior to the pre-defense meeting, the student must provide the committee with the following:

- An outline of the thesis (indicating sections that have been completed and any experiments that have not yet been completed)
- A final version of the introductory chapter
- Evidence of having published significant findings of their primary thesis research, as a first author, in peer-reviewed journals
- Drafts of any papers that are being reviewed for publication or about to be submitted
- An updated curriculum vitae (CV)

11.2 Ph.D. Thesis (Dissertation)

The Graduate College has strict requirements for the thesis format. A copy of these thesis guidelines can be obtained from the Graduate College website or from the Thesis Office. Please read these thesis guidelines carefully before writing your thesis.

Once you have made all revisions that were suggested by your thesis committee, the format of your thesis will be reviewed by the CDB Office. Once approved by the Department, the thesis can be sent to the Graduate College. The Thesis Office will review your thesis and if any changes are necessary will send an email of necessary corrections. A time lag of up to, but not exceeding, three (3) semesters is permitted between time of the final exam (thesis defense) and official deposit of the thesis in the Graduate College, but the degree is not official nor conferred until all other degree requirements have been met and the thesis is deposited. The Graduate College website outlines the steps necessary for the deposit of the thesis.
11.3 Thesis Defense (Final Examination)

The Final Thesis Defense Committee will be the same as the Thesis Committee with the researcher advisor serving as the Director of Research.

The Ph.D. candidate should arrange a time with the committee and reserve a room for the final defense, and inform the CDB Office of the time and place of defense. The student is expected to submit his/her thesis to committee members \textit{at least 2 weeks prior} to the final defense. The committee will read the thesis and make suggestions for corrections and any additional work which may be necessary to complete the Ph.D. If it is determined by the committee that the required changes are so extensive that this timeline cannot be met, or if the changes could be made but the student fails to meet this two-week deadline, the defense will need to be rescheduled.

Upon passing the defense the committee will sign the “Final Examination Result” form. The student must schedule a one-hour seminar \textit{within 7 days} of successful defense, preferably in a Monday or Wednesday seminar slot. \textit{All faculty and students will be expected to attend}. After the seminar, the “Final Examination Result” form will be signed by the department and forwarded to the Graduate College. (Thesis Committee members sign the form at the time of defense if the student passes.) \textit{One bound copy} of the final thesis must be turned in to the CDB Office after the Graduate College has approved the thesis for deposit.

When a thesis is successfully defended and deposited, the DPR grades for CDB 599 will be changed to S (satisfactory). If the student fails the final defense, the grade becomes U (unsatisfactory), and the thesis cannot be deposited. No credit will be given for CDB 599 unless a thesis is deposited.

11.4 Electronic Deposit of Thesis (EDT) \url{http://www.grad.illinois.edu/thesis-dissertation}

When you submit your thesis to the Graduate College, you will be asked to select a release option for your work in IDEALS. These options go into effect when the Graduate College transfers your thesis to IDEALS. Take time to review “IDEALS Deposit Agreement: Non-Exclusive Distribution and Preservation License” prior to submission.

\textbf{IDEALS Release Options}

Read the detailed information about IDEALS at: \url{http://www.grad.illinois.edu/thesis/release-options}

\textbf{ProQuest Release Options (Optional)}

Read the detailed information about ProQuest at: \url{http://www.grad.illinois.edu/thesis/release-options}

11.5 The Graduate College Calendar

The \url{Graduate College Calendar} lists the dates of important deadlines for graduate students. Degrees are conferred three times per year, in May, December, and August.

11.6 Degree Certification

Since degree conferral occurs at the end of the semester, after completing the thesis deposit, a student may request a Degree Certification Letter (DCL) by downloading the \url{Degree Certification Letter Request} from the Graduate College website. After completing and signing the top half of the form, submit the DCL request to the CDB Office, who will
complete the departmental section and route the completed request to the Graduate Student Academic Services (GSAS) Office for processing.

12. Additional Requirements, Situations and Expectations

12.1 Experimental Records and Data

All experimental procedures and results should be carefully recorded in the student’s lab notebooks. Laboratory notebooks should be systematic and thorough enough to be scrutinized by other scientists or granting agencies. According to federal funding agencies, University of Illinois, and Departmental policy, all lab notes and data are considered property of the laboratory where the research was done and should remain in the laboratory when the student leaves. With permission of the research advisor, the student may take a copy of these materials upon leaving the lab.

12.2 Ethical Conduct

Students and faculty are expected to hold the highest ethical standards during their pursuit of scholarly research and teaching. Students should become familiar with the definition of academic misconduct. All students are expected to adhere to the standards of intellectual and academic integrity:

http://www.grad.illinois.edu/gradhandbook/1/chapter3 and
https://www.ethics.uillinois.edu/cms/One.aspx?portalId=1216&pageId=9223

Each student must complete MCB 580, Research Ethics & Responsibilities.

12.3 Vacation and Sick Leave

Success in any biology Ph.D. program and a scientific career thereafter requires hard work and dedication. In contrast to classwork, experiments may continue on weekends and between semesters year round. The time between classes is often the most productive time to do experiments. Graduate students are not eligible for vacation except for the official University holidays.

Graduate students who wish to schedule a vacation must have the time approved by his/her advisor well in advance. Research and teaching assistants are entitled to 13 days of non-accruable sick leave each year. In the event of more protracted illness, leave without pay may be requested (see below).

12.4 Academic Leaves of Absence

Below is a short description of the Academic Leave of Absence. It is your responsibility to read all the information regarding an Academic Leave Of Absence in at:

http://www.grad.illinois.edu/gradhandbook/2/chapter2/registration

Graduate Students in degree-seeking programs are entitled to a total of two terms (fall and/or spring semesters) of academic leave of the types described below, in the course of a single degree program. Students who anticipate not being enrolled for one or more terms, (fall or spring semesters, not summer), for whatever reason must meet with their program adviser before the first day of classes of their period of non-enrollment to apply for and receive approval for an Academic Leave of Absence. Students who are enrolled in summer only programs must apply for a Leave of Absence before taking a summer term off.

There are two categories of Academic Leaves of Absence:
• Personal Academic Leaves of Absence may be requested for a variety of reasons, including but not limited to leave for health reasons, for personal reasons, for active military service, or to take care of dependents or family members.

• Academic Progress Leaves of Absence may be requested for instances of academic activity such as Study Abroad when the student registers at another institution, or fieldwork when the student is not using UIUC resources including faculty time, nor receiving financial support paid through the University. Expectations of progress to be made during the Leave should be documented in the student’s academic file. International Students: International students must meet with an ISSS adviser prior to requesting a leave and the ISSS adviser must sign the Request for Academic Leave of Absence form.

12.5 Grounds for Dismissal

A student must be “in good standing” to remain as a student in the CDB. There are several situations that will cause a student to lose their good standing status:

• Academic probation (cumulative GPA less than 3.0)
• Failure to fulfill coursework requirements, such as two cumulative “unsatisfactory” grades in CDB 595A and/or CDB 595C
• Failure of the Preliminary Examination
• Failure to make satisfactory progress deemed by the thesis committee
• Misconduct relating to propriety, ethics, failure of effort, or lack of progress. These problems can manifest in either the student’s coursework or lab work. While any faculty member can report various types of student misconduct, the student’s research advisor is usually in the best position to determine if such misconduct is taking place. It is the advisor’s responsibility to handle these issues as deemed necessary including expulsion of the student from their laboratory.
• The student is automatically and immediately considered to be in poor academic standing in CDB if he/she does not have a thesis lab.

13. Financial

13.1 Appointments

Four types of financial assistance are available to graduate students:

• Teaching assistantships
• Research assistantships
• Fellowships
• Training grant appointments

The stipend is divided into 11 equal payment units for TAs and RAs. A student will receive payment on the 16th of each month for 9 months during the fall and spring semesters and two months (June and July [RAs], July and August [TAs]) during the summer term. While there are only 11 payments, your contract is for 12 months. Thus, you are expected to work during the month you do not receive a paycheck.
13.2 Paychecks

Paychecks and reimbursements from the University will be direct deposited into your bank account.

13.3 Tuition Waivers

Each student holding an appointment of at least 25% but not more than 67% receive a tuition waiver. [http://www.grad.illinois.edu/gradhandbook/2/chapter7/tuition-waivers](http://www.grad.illinois.edu/gradhandbook/2/chapter7/tuition-waivers) Fees must be paid by the student.

13.4 Fees

Registered graduate students must pay all applicable fees [http://www.grad.illinois.edu/gradhandbook/2/chapter7/assessment](http://www.grad.illinois.edu/gradhandbook/2/chapter7/assessment)

14. Master’s Degree

CDB does not recruit students into a separate Master’s degree program. The program exists only to assist Ph.D. students in good standing who may wish to receive the Master’s degree. The CDB Master’s degree requires that students complete all of the same coursework required of Ph.D. students during their first two academic years, Section 5. If a student has passed the Prelim Exam and fulfilled all the course requirement, the Master’s degree can be granted at any time, upon the student’s request. The CDB office will assist with the Department and Graduate College procedures.

If a student fails the Prelim Exam but has otherwise fulfilled all requirements of the Ph.D. program in the first two years and would like to be considered for a Master’s degree, the Graduate Program Committee will, in consultation with the student’s Prelim Exam committee, determine whether or not the student qualifies to receive a Master’s degree.

Should the committee approve of a path to Master’s degree, the student must also fulfill all research requirements set forth by the advisor, including completion of bench work and documentation of research results.

15. Departmental Grievance Policy

Most conflicts and problems that arise can be resolved informally, without invoking formal grievance procedures. University policy strongly encourages all students who believe they have a dispute or conflict to use all appropriate avenues for informal resolution before initiating the Graduate College grievance process.

A graduate student who has a problem should first discuss that problem with the person who seems to be the source of the difficulty. If that discussion is inappropriate or unfruitful, the problem could still be resolved informally with assistance from other individuals in the department. We encourage meeting with your advisor, members of your thesis committee, chair of the Graduate Program Committee, Dr. Lisa Stubbs, or Associate Head of the department, Dr. David Rivier. The Head of the department, Dr. Jie Chen, is also available to discuss any issues if necessary.

Graduate students may file a formal grievance with the Graduate College if informal efforts to resolve the problem are not successful. The grievance may be filed directly with the Graduate College. See the [Graduate College Policy and Procedures on Grievances by Graduate Students](http://www.grad.illinois.edu/gradhandbook/2/chapter7/assessment). Students who wish to consult with a Graduate College dean about a possible grievance situation may call the Graduate College to make an appointment.
16. Frequently Asked Questions (FAQs)

**What if the advice that my advisor gives me is different from the advice of the CDB Department program?**

It is the responsibility of your advisor to provide advice that will facilitate your progress through the CDB curriculum and to understand the Program requirement and goals. Your advisor is required by the Department to be supportive of your efforts to hold your Preliminary Exam on time, to write the required documents in the appropriate format, and to turn them in on or before the due dates. If you have questions or concerns, please feel free to contact the Chair of the CDB Graduate Program Committee.

**What if my advisor asks me to change my research project completely?**

Occasionally it is in your best interest to redefine your research project. Ideally, you should have a good working relationship with your advisor and you resolve this issue together. If you need advice on how to establish improved communication with your advisor, you may meet with the Chair of the CDB Graduate Program Committee.

**What if I want to change advisors or programs?**

The decision to change advisors should not be taken lightly. It is likely that a change in advisors will increase the time to completion of the Ph.D. degree and reduce the recognition he/she would receive for any work already completed. Because of these consequences, the student and advisor should attempt to resolve any conflicts or adjust the program of the student to better fit their career objectives before making the decision to change advisors. See [Section 1](#).

A written agreement may be necessary in cases that have implications for publications, ethical conduct, or grievances.

**What if I need to substitute a member of my thesis committee?**

If you need to substitute a member of your thesis committee, you need to confirm that the new prospective member has at least the same status as the one who is leaving, i.e. tenure-track faculty in CDB or not in CDB. The new member will have to be approved by the CDB Graduate Program Committee.

**What if I would like to have a non-tenured professor on my thesis committee?**

If the scientist that you would like to have on your committee is not tenured or on a tenure-track appointment, you need to write a note to the Graduate College via the CDB Office and explain why this prospective member will be an asset to your committee. One successful explanation is to say that Professor (X) is one of a very few experts in the field of (___) on this campus and he or she will provide extremely valuable advice on your dissertation research progress. You should be as specific as you can in relating the prospective committee member’s credentials to your research project.

**What if I have an exceptional circumstance and I cannot take my Preliminary Examination during the second semester of my second year?**

If a student has unusual and compelling circumstances (e.g., switching of research advisor or serious illness) during the first two years of graduate study that prevents him/her from taking the Preliminary Examination by the end of the second year, the
A student may request an extension in a letter to the Chair of the CDB Graduate Program Committee, before March 1st of the second year. Also, the student must ask his/her advisor to submit a letter to support the petition. If the extension is granted, the student must take the Preliminary Examination during the following September CDB examination period. In the event an extension is denied, the student will take the Preliminary Examination as previously scheduled.

*How do I know when I'm finished with my Ph.D. research?*

Typically, the student and advisor come to an agreement regarding the extent of the project when the student is writing the Preliminary Examination. The Thesis Committee will initially endorse feasibility and initial timeline of the project. The annual student reviews will provide a guide for student, advisor, and the thesis committee in assessing student progress. Students should publish their findings as they complete appropriate portions of their research. This will provide milestones for the student and advisor and provide the framework for your thesis chapters. If the student and advisor cannot agree that the student has completed the entire dissertation research project, the student should seek counsel from the Thesis Committee.

*What if I have additional questions or suggestions for new FAQ's?*

Please contact:

Laura Martin  [lmmartin@illinois.edu](mailto:lmmartin@illinois.edu)  Office Manager

Ashley Compton  [ashleync@illinois.edu](mailto:ashleync@illinois.edu)  Office Assistant

Dr. Lisa Stubbs  [ljstubbs@illinois.edu](mailto:lajstubbs@illinois.edu)  Chair of the CDB Graduate Program Committee.