THESIS AND DEFENSE
POLICIES AND GUIDELINES

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Information regarding the thesis, defense and program completion can be found on the Graduate Division Thesis Defense and Graduation website.

Contact Email: gradregistrar@einsteinmed.edu
The Dissertation

The doctoral Thesis, or Dissertation, is the all-encompassing document describing original research carried out by the graduate student in the laboratory in pursuit of the Doctor of Philosophy degree. In general, the research has been structured to answer a question or group of questions, or to explore particular hypotheses, and has resulted in a body of novel data. The historical background, the scientific context of the experiments, and the data are presented and discussed extensively in the Dissertation.

Manuscript Requirement to Defend and to Graduate:
*Students are required to publish at least one first-author paper from their original thesis research, or if not, to document and append to the Thesis, the final draft of a submitted first-author manuscript. The manuscript should be indicated as “In press” or “Submitted” (and to which journal), or “In revision” (for which journal).*

*First-author manuscript must be submitted no less than three weeks prior to the date of defense.* For “Submitted” manuscripts, confirmation from the journal to which the manuscript was submitted must be forwarded to the Graduate Division office, and student must also provide a copy of the confirmation to the Thesis Defense Committee upon submission of the Thesis prior to the defense. (See timeline for Submission of the Thesis Prior to the Defense section below.) Note: A submission to bioRxiv is not acceptable to meet the first-author manuscript submission requirement.

It is not unusual for the thesis research to generate two to three publications in which the student is the leading author. However, a specific number of published manuscripts is not required and it is expected that some of the thesis research may be published following the thesis defense. A co-first authorship paper meets the requirement. All collaborative work that contributes to the Dissertation must be clearly indicated in the text. Each Chapter should indicate which publications (if any) are represented by the described work. All collaborative work that contributes to the Dissertation must be clearly indicated in the text.

The Thesis Defense Committee

Composition of the Thesis Defense Committee


The Thesis Defense Committee is selected by the student and the mentor and must:
- Consist of a minimum of five members, on the tenure-track ranked assistant professor or higher.
  - At least four of the five members must be from the departments that comprise the Graduate Division.
  - One member must be designated as the Committee Chair who must be a senior member of the faculty (Professor or Associate Professor), and has had experience serving on a Defense Committee. The Chair does not have to be a member of the student’s home department.
  - At least two members must hold a primary or secondary appointment in the student’s home department/concentration.
  - Inclusion of an examiner from outside the institution with expertise in the area of the student's research is desirable, although the fifth member of the Committee may be an additional member of the basic science (or PCI) faculty. The external examiner must hold a current faculty position.
A former Einstein faculty member may serve on the Defense Committee if they are in emeritus or distinguished status, or hold a current faculty position elsewhere.

- For students in the PCI department:
  - At least one faculty member must have a primary or secondary appointment in a basic science department (other than PCI),
  - At least one of the members on the defense committee must have had prior experience serving on a Thesis Defense Committee.

- Each student is strongly encouraged to designate a sixth faculty member as an alternate in the event that an examiner cannot attend the Thesis Defense. There must be five members present at the Thesis Defense.

- The Thesis Defense Committee must consist of faculty members who are eligible to train graduate students (i.e. tenure-track faculty ranked Assistant Professor or higher). An Instructor, Associate, or faculty on the research track may not serve on the Thesis Defense Committee.

- The name of any Thesis Defense Committee member who was a collaborator with the student must be indicated by the check box on the submitted Thesis Defense Committee Form. A collaborator may not serve as Chair of the Thesis Defense Committee.

- The student’s mentor and/or co-mentor may not serve on the Thesis Defense Committee although the mentor and/or co-mentor are present at the Thesis Defense.

- If the student has an associate (contingent) mentor, this mentor cannot serve on the Thesis Defense Committee. An associate mentor is a basic science faculty member designated by the student and primary mentor to oversee the student’s laboratory research while the primary mentor is physically no longer at Einstein or away on sabbatical.

If necessary, the Graduate Executive Committee will review, on an individual basis, any Thesis Defense Committee whose make up is not in line with these guidelines.

Once the Mentor Acknowledgement Form is submitted to the Graduate Office (due one month prior to date of defense), a student must not change the composition of their Thesis Defense Committee. A committee member may step down of their own accord for appropriate reasons (e.g. illness, sudden conflict of interest, unresolvable time conflict, etc.). The associate dean for graduate programs must approve any subsequent change to the defense committee following initial approval of the defense.

**Approval of the Thesis Defense Committee**

The Associate Dean for Graduate Programs must approve all Thesis Defense Committees. **At least two months prior to the scheduled defense date, the student must submit to the Graduate Division office**

- a completed and signed Thesis Defense Committee Form,
- a full/formal Curriculum Vitae (CV), and
- a copy of the Thesis Seminar Announcement.

The Thesis Defense Committee Form is available on the forms page of the Graduate Division website, and requires signatures from the student’s Thesis Defense Committee Chair, Mentor(s), Department Chair and Department Administrator. International students on a student visa must have their Thesis Defense Committee Form approved by the Einstein Office of International Services (OIS).
Once the Thesis Defense Committee has been approved by the Associate Dean, the student, mentor(s) and Defense Committee Chair will be sent an email confirmation from the Graduate Division office.

All subsequent changes to the Thesis Defense Committee must be approved by the Associate Dean. In the event that changes in the Committee must be made, and the Associate Dean is not available for consultation, the approval of the appropriate Department Chair should accompany the final report of the Committee.

Note:
- Students must successfully complete all required coursework and the Qualifying Examination prior to submission of the Thesis Defense Committee Form.
- All defending students must attend the Thesis Defense Workshop on plagiarism and proper reference citation offered in the fall each year.

**Scheduling of the Thesis Defense**

The Thesis Defense and Seminar are scheduled by the student, who is responsible for finding the rooms and confirming that all members of the Thesis Defense Committee can attend. The Thesis Seminar is usually scheduled immediately before the actual defense. The student’s Department Administrator can assist with room reservations and drafting the Thesis Seminar Announcement. A copy of the Thesis Seminar Announcement must be submitted to the Graduate Division office with the Thesis Defense Committee Form.

All expenses related to the Thesis and Defense are the responsibility of the student's department. An honorarium is not appropriate and will not be provided by the Graduate Division.

*Note: No Thesis Seminar or Defense is to be scheduled on official program holidays* as indicated on the Graduate Division Academic Calendar available on the Graduate Division website.

**Submission of the Thesis Prior to the Defense**

**Four weeks prior to the defense:**
At least four weeks prior to the scheduled date of defense, the student must submit the signed Mentor Acknowledgement form to the Graduate Division office. By signing this form, the mentor is acknowledging that he/she has read the Thesis document and that the Thesis document is ready for submission to the Thesis Defense Committee. The student is responsible for submitting the Thesis to the mentor in a timely manner so that there is time to make any additional revisions prior to this four-week deadline.

The student is to retain copies of the signed acknowledgement form for each member of their Thesis Defense Committee. *(The Mentor Acknowledgement of the Thesis Document form is available further below in these Guidelines.)*

**Three weeks prior to the defense:**
At least three weeks prior to the scheduled date of defense, a copy of the Thesis, along with a copy of the Mentor Acknowledgement form, must be submitted to each member of the Thesis Defense Committee. At the point of submission of the Thesis to the Defense Committee, the student must have submitted at least one first-author manuscript. Submitted first-author manuscript must be included in the Thesis appendix. See *Manuscript Requirement to Defend and to Graduate* section above.
Two weeks prior to the defense:
A member of the Thesis Defense Committee may require a postponement of the Thesis Defense if this submission requirement is not met. Once the Thesis is received, within one week (i.e. two weeks prior to the defense) any Thesis Defense Committee member may request a pre-defense meeting of the Committee if, in the opinion of the Committee member, the Dissertation is not defensible. If the defense is indefensible, the Thesis may be returned to the student for substantial re-writing and/or new experiments and rewrite. If the Thesis is returned to the student, a new defense date must be set. The Thesis Defense Committee chair must notify the Associate Dean and Graduate Division Registrar of any postponement.

Conduct of the Thesis Defense

The purpose of the Thesis Defense is to demonstrate in an oral form the knowledge and skills acquired to carry out research that provides new information on a significant problem. The Thesis Defense is an exam, and as such, the student should be well prepared for the exam. The following are recommended guidelines for conducting the Thesis Defense:

The Thesis Seminar, whenever possible, should immediately precede the oral Defense.

Presentation of a Public Seminar

The presentation of a public seminar at the College of Medicine is required for successful completion of the PhD degree. This seminar also fulfills a New York State requirement that a PhD candidate demonstrate his or her ability to present scientific material in public. This seminar is usually presented immediately preceding the defense. A copy of the announcement of the seminar must be forwarded to the Graduate Division office for inclusion in the student's file. An announcement of the time, place and subject of the public seminar should be widely disseminated at the College of Medicine, and a draft copy of this announcement should be included with the Thesis Defense Committee form submitted to the Graduate Division office.

The Chair of the Defense Committee should be selected by the student and mentor, and must be a senior member of the faculty (see Composition of the Thesis Defense Committee). The Chair will have received the Thesis Defense Committee Report Form from the Graduate Division office and will bring this form to the defense. (The Defense Report Form is also available on the Graduate Division Forms webpage.) The Chair will identify to the group any members of the Defense Committee who have acted as a collaborator during the course of the student’s research, and will confirm that the manuscript submission requirement has been met.

At the commencement of the defense, the student should be excused and the Chair (and/or mentor) will then provide a profile of the student’s background, course work, and publication record. The Chair, in consultation with the examiners, will then determine how the Thesis Defense will be conducted. If any of the examiners expresses a serious concern with the content of the Thesis, a strategy should be developed whereby the questioning can address these concerns in a constructive manner. The student will then be asked to return and the exam can commence. If a Thesis Seminar was not given immediately prior to the defense, the student should give a short (~10 minutes) synopsis of the major findings of his or her research.

It is strongly recommended that an external examiner be invited to the Thesis Defense. If an external examiner has been invited to participate in the Thesis Defense, it is recommended that this examiner be invited to commence the questioning period. Examiners will be allowed a ~10 min question period in turn, with the opportunity to have
a second round of questioning. Alternatively, questions will be permitted to follow logically from the initial set of questions, with examiners sharing the examination period.

The mentor or co-mentors may be present during the Defense, but cannot ask questions, and are not expected to answer any questions for the student unless clarification is asked for from the examiners.

The Chair should ensure that the Defense is conducted in a professional manner, and that each examiner has the opportunity to ask questions. The Chair should also ensure that the length of the exam is appropriate. A typical exam period is one to two hours.

After the Chair has determined that the Defense is at an end, the mentor and the student are asked to leave the room. The Thesis Defense Committee vote is confidential and the mentor should leave the room together with the student during the voting procedure. The Defense is discussed, and a decision is made. The decision is determined by majority vote. If the vote is for “minor revision” then the grade is Pass and the mentor is usually given the responsibility of checking the final revised document. If the vote is for “major revision”, a member of the Defense Committee, or subcommittee, is usually assigned to review and accept the corrections on behalf of the Committee. A decision for “major revision” results in the grade of Conditional Pass (see below).

**Evaluation of the Dissertation and the Thesis Defense**

A Thesis Defense Report Form is available on the Graduate Division website (www.einstein.yu.edu/phd). When the examination is complete, the members of the Thesis Defense Committee will assign a grade and sign the report form. By majority vote of the Committee, student can receive a grade of Pass, Conditional Pass or Fail for the examination. The Chair of the Committee, or the defending student, must return the completed original Thesis Defense Report Form to the Graduate Division office (Belfer 202) immediately following the oral defense.

**Pass**
The student has a **maximum of three months** from the date of defense to satisfy all additional requirements for PhD program completion. See below, Absolutely Required for the PhD Degree.

*Note:* the three months following a successful Thesis Defense is for the purpose of making final revisions to the Thesis.

**Conditional Pass**
A grade of Conditional Pass will require the student to complete extensive revisions of the Thesis as set forth by the Thesis Defense Committee. In addition to the Thesis Defense Report Form, the Chair must also submit a written summary outlining what revisions are necessary to the Thesis and recommendations for rectifying deficiencies in the Thesis.

In the event of a grade of Conditional Pass, the student has a maximum of five (5) weeks to revise the Thesis and submit it to the Thesis Defense Committee. The Committee then has three (3) weeks to review the revised Thesis and submit a final grade of Pass or Fail to the Graduate Division office. *All Thesis deficiencies must be corrected and a final thesis defense grade provided within a maximum of two months from the date of defense.*

If the student receives a final grade of Pass for the revised Thesis, the student must now submit the necessary paperwork for program completion as outlined below. *Note: The student has a maximum of three (3) months from the date of defense to satisfy all requirements for program completion following a grade of Conditional Pass.*
Fail
The grade of *Fail* for the defense will lead to complete review of the student’s academic record and thesis defense by the Academic Affairs Committee. Re-defense is at the discretion of the Academic Affairs Committee who may call both student and mentor to appear at an AAC meeting. Should the student be allowed to re-defend, the student and mentor, working together with the Student Advisory Committee, must submit to the AAC and the Associate Dean for Graduate Programs a written plan for re-defense and completion of all requirements for the PhD degree. In some cases, the AAC may recommend dismissal from the PhD program. No PhD degree will be awarded in the event of dismissal.

Completion of All Requirements after Successful Thesis Defense

**Absolutely Required for the PhD Degree**

The following items must be submitted to complete the requirements for the Doctor of Philosophy degree:

To be submitted to the Graduate Office (gradregistrar@einsteinmed.edu):
- Graduation Checklist Form (signed by the student),
- A copy of the email confirmation from ProQuest
- A copy of the signed Thesis Title page (signed by the student and mentor(s)),
- PhD Diploma Form (indicating your full (legal) name as it should appear on the diploma),
- PhD Alumni Survey Form (providing a forwarding address and new contact information),
- A copy of the Survey of Earned Doctorate Certificate of Completion
- Honorary “Thank You” Certificate Form (optional)

To be submitted online:
- The Survey of Earned Doctorate is to be completed online at https://sed-ncses.org,
- PhD Learning Environment Survey (link to the survey will be provided from the Office of Institutional Research)
- The final version of your doctoral thesis, with an originally signed thesis title page (as page 1 of the document), must be submitted online through ProQuest at https://secure.etdadmin.com/einstein. A guide with instructions on how to submit the thesis online is available on the Graduate Division’s Thesis Defense webpage.

**Submission of the Final Thesis and Abstract to ProQuest**
The final version of the thesis must be submitted online to ProQuest. The thesis must be submitted as a PDF document, with an originally signed Thesis Title page included as the first page. The title page must be signed (in black or blue ink) by the candidate and the thesis mentor (and co-mentor, if applicable). ProQuest will register the thesis for US Copyright, and also provide bound copies of the thesis. The Graduate Division will cover the fee for copyright registration and for four bound copies of the thesis (a student copy, a mentor copy, a department copy, and a Library copy) and a microfilm copy of the thesis for the Library. The student may order additional bound copies of the thesis at their own expense through ProQuest.

Additional materials such as media files, and written permission from other copyright holders of the thesis are also to be submitted through ProQuest.
For further copyright guidelines, go to:

To be submitted online to the Office of Student Life:

- **Commencement Form** (to be completed online closer to the date of the commencement ceremony. Graduates will be notified via email when it is time to complete this required online form.)
- **Yearbook Page** (optional) link will be sent to graduates and prospective graduates.

An MD-PhD student who is moving on to the clinical wards after the defense must submit the following *within three months of the date of defense*:

- the **final copy of the thesis to ProQuest** (as indicated above)
- A copy of the **email confirmation from ProQuest**
- a copy of the **signed thesis title page**

The remaining Graduate Division paperwork and the Graduation Application for the Office of Student Activities are due closer to the MD-PhD student’s time of graduation. The student will be sent email notices as necessary regarding their specific due dates.

**Change in Status After the Thesis Defense (for PhD and MD-PhD Students)**

**MD-PhD Students:**
If an MD-PhD student has successfully defended the PhD thesis, but has not completed the clinical phase of their training, the student will be awarded the PhD degree (for the next upcoming degree-granting date) upon submission of the final paperwork that is **Absolutely Required for the PhD Degree**.

**PhD Students:**
A student who has successfully defended the Thesis may remain enrolled in the Graduate Division as an “active student” for up to a **maximum period of three months from the date of defense** if funding is available and the student and mentor agree to this arrangement, and if the student remains in the lab. This period is for making final revisions to the thesis document.

A student has a maximum of three months from the date of defense to submit all required paperwork for program completion.

Upon submission of the required paperwork for program completion, the student will no longer be an “active student”. If the student is to remain at the institution, the student’s status must be changed to that of “Postdoctoral Fellow.”

**Note:**
- The student must inform the Graduate Division Registrar’s Office (gradregistrar@einsteinmed.edu) of:
  1) any changes in address or contact information,
  2) plans to leave Einstein prior to submission of all required paperwork for program completion, or
  3) plans to change status to Postdoc.

*Failure to inform the Graduate Office may jeopardize the student’s degree completion status.*
Thesis and Defense Guidelines

- If the student is starting a new position prior to their three-month deadline and requires certification of the PhD degree for the new position, all final paperwork listed above must be submitted in order to receive certification that the PhD degree is earned.

Housing:
A student who resides in Einstein Housing must vacate housing within 30 days of program completion. Any other arrangement must be made directly with the Housing Manager.

Health Benefits:
If a student is enrolled in the Einstein Student Health Plan, the plan will terminate on the last day of the month in which the student is terminated from payroll. Contact the Benefits Office (benefits@einsteinmed.edu) with any questions.

Stipend:
If you're leaving Einstein, your last scheduled paycheck will be a physical check mailed to the W2-Payroll address in Self-Service Banner. Please update your address through the Luminis Portal before moving. If you need to make any subsequent address changes, please email payroll@einsteinmed.edu.

Email and AD Credentials: Fourteen days from the date of program completion, the student email will be changed to an ‘@alumni.einsteinmed.edu’ email address which the graduate is entitled to use in perpetuity. The student email address will no longer be accessible after fourteen days from the date of program completion. The graduate will be sent appropriate communication from Montefiore IT regarding termination of the student email and information on how to access the alumni email. The Active Directory (AD) username will be disabled.

If the graduate remains at Einstein as a Postdoctoral Fellow, the proper email and AD credentials will be assigned through the HR onboarding process for the postdoc position.

Post-Defense Leave of Absence:
In the event that a student leaves the institution (i.e. no longer on Einstein payroll) prior to completing all program requirements for the PhD degree, the student will be placed on an unpaid Post-Defense Leave of Absence.

Note:
- A student on an unpaid post-defense leave of absence is no longer in active, full-time status and therefore no longer eligible for loan deferment.
- Medical benefits for a student on an unpaid post-defense leave of absence will terminate on the last day of the month in which the student is terminated from payroll.
- The maximum time allotted for an unpaid post-defense leave of absence is three months from the date of defense. No extension permissible.
- As a condition of maintaining student status, all international students must pursue a “full course of study.” The post-defense leave of absence is therefore not available to international students.

Change in Status for International Students:
An international student on a student visa, who intends to remain in the United States for further training after completing the PhD, must apply for Optional Practical Training (OPT) at least three months prior to the date of the Thesis Defense. Students are strongly advised to consult the Office of International Services (OIS) at Einstein well in advance of any anticipated change in status. Visa restrictions and requirements change frequently.
Granting of the PhD Degree

There are three official PhD degree-granting dates: the end of September, the end of January, and end of May. These dates are published annually on the Graduate Division Academic Calendar.

All academic requirements must be fulfilled on or before the deadline date for each of the official degree-granting dates as indicated on the academic calendar. This includes completion of all coursework and other departmental requirements, successful defense of the Thesis (Conditional Pass is not sufficient), completion of all revisions, deposit of five copies of the Thesis in the department office, and completion of all required paperwork.

Upon satisfaction of all requirements for the PhD degree, certification of receipt of the PhD degree may be made by the Registrar at any time during the year. Formal award of the PhD diploma will be made at the subsequent Albert Einstein College of Medicine Commencement Exercises. All financial obligations to the College of Medicine must be met prior to the release of the diploma. Students must clear their accounts with the Housing Office, the Library, and the Office of Student Finance in order to receive the PhD diploma.

Participation in the Annual Commencement Ceremony

September and January Graduates:
September and January PhD degree recipients will be contacted through email by the Graduate Division Registrar’s Office and/or the Office of Student Life regarding participation in the formal Commencement Ceremony held in May. These graduates will have a deadline (typically in January) to complete the required online Commencement Form online.

May Graduates:
All academic requirements must be fulfilled on or before the April deadline date as indicated on the Graduate Division academic calendar in order to receive the May PhD degree-granting date and also participate in the Commencement Ceremony. There will be no exception to this April deadline for a May PhD degree. (See Absolutely Required for the PhD Degree above for program completion requirements.)

Instructions for Preparing the Dissertation

Two Dissertation formats are generally accepted by the Departments within the Graduate Division. Students must consult with the appropriate faculty in their Department to insure that their Dissertation format is acceptable by their Department. ‘Format A’ is the traditional organization of a Dissertation. ‘Format B’ is organized with each chapter corresponding to a published (or in preparation) journal article. However, it is emphasized that a collection of published papers cannot be submitted in place of a Dissertation. An improperly prepared Dissertation may be returned to the student by the Committee without review.

General Instructions
In general, successful theses range from 125 – 225 pages without references.

i) Manual of Style: On points of style (including capitalization and punctuation) not covered by the above, follow the recommendations of your Department. The style selected should be adhered to strictly and consistently. If no style is preferred by the Department, the Manual for Writers of Dissertations by Kate L. Turabian, University of Chicago Press, should be used.
ii) **Line Spacing:** The text of the Dissertation is to be double-spaced except for indented quotations, footnotes, figures, legends and bibliography, which are to be single-spaced.

iii) **Required font for text:**
- Arial 11 pt.
- Helvetica 11 pt.
- Times New Roman 12 pt.

iv) **Paper:** The final copies of the Dissertation are to be printed on 8 ½" x 11" high quality paper (24 lb.) that is not punched or perforated in any way.

   (a.) Copies submitted to the Thesis Defense Committee may be:
   1) duplicated on standard photocopy paper,
   2) printed double sided and,
   3) secured using either a three-hole binder or a spring binder.

v) **Pagination:** Every paper in a Thesis is assigned a number typed on it. There are two series of page numbers. The first, in small Roman numerals, begins with the title page and ends with the last page preceding Chapter I. The second series, in Arabic numerals, begins with the first page of Chapter I and continues throughout the Dissertation, including graphs, illustrations, tables, bibliography and appendices.

vi) **Margins:** The margins at the top, bottom and right are to be 1.0 inch; the left-hand margin is to be 1.5 inches. All tables, charts and illustrations are to have left-hand margins of no less than 1.5 inches because of binding requirements. Any over-sized material may be folded in from the right, top and bottom in such a way as to leave a 1.5-inch margin on the left side.

vii) **Spelling:** The spelling given in any standard dictionary may be used. However, whatever forms are adopted should be adhered to consistently throughout the text of the Dissertation.

viii) **Quotations:** Quotations of more than three lines should be single-spaced, set off from the text in a separate paragraph and indented four spaces, with double-spacing between paragraphs. Opening and closing quotation marks are omitted. Quotations of three lines or less are enclosed in quotation marks and are run into the text.

ix) **Tables, Figures, Reproductions:** The recommendations of the style manual are to be followed in preparing tables, figures and other graphic materials. Tables and Figures and all legends should be embedded into the document.

   Tables are numbered consecutively throughout the Thesis. The word TABLE, followed by the appropriate Arabic numeral, is placed above the caption.

   Figures are numbered consecutively in Arabic numerals, with the word "Figure" (only the first letter is capitalized) and the appropriate numeral appearing before the caption. If possible, figures should be oriented in the “portrait” configuration. Submitted figures should be of sufficiently high resolution to be interpreted by the reader. Figures may be embedded into the text, with text wrapped around, or embedded as separate pages. In either case, make sure that the Figure Legends are adjacent to the figures and easy to find and read.
x) Digital media or jpeg for high resolution images may be submitted on an accompanying CD-ROM.

xi) *References and Footnotes:* References to published articles should be cited by author and year (i.e. Student and Mentor, 1995, or Student et al., 1995). Every reference listed must appear in the bibliography (see below for “Bibliography”).

Footnotes are to be placed at the foot of the page and numbered consecutively for each chapter.

**The generally accepted Thesis formats (Formats A and B) are described below.** The format chosen must be maintained throughout the Dissertation. Students must discuss with their mentor the Dissertation format acceptable to their Department.

**FORMAT A**

i) *Introduction:* The comprehensive Dissertation begins with a scholarly introduction (Chapter I). This section should include a historical review of the student’s area of research followed by a critical evaluation of the current status of the field. The student should then present working hypotheses and give an introduction to the system and the thesis research. The student should consult with his or her mentor in order to agree upon how extensive a historical review is appropriate to the Dissertation.

ii) *Methods and Materials:* The protocols and procedures used in the Dissertation studies should be presented in sufficient detail to allow reproduction of the experiments (Chapter II). A Dissertation provides an appropriate vehicle for experimental details that might be omitted from journal articles due to space limitations.

iii) *Results and Discussion:* Chapters III …n of the Dissertation should present the results of the conducted studies followed by a discussion of their significance. The format for these chapters should follow that in the suggested manual of style or of a highly respected scientific journal, mutually agreed upon by the student and the mentor.

iv) *Conclusions:* A Dissertation should end with a general discussion of the studies that have been conducted including an assessment of the significance of the research, arguments of interpretation, evaluation of material included in appendices, and a plan for the experimental resolution of unanswered questions.

**FORMAT B**

i) *Introduction:* The comprehensive Dissertation begins with a scholarly introduction (Chapter I). This section should include a historical review of the student’s area of research followed by a critical evaluation of the current status of the field. The student should then present working hypotheses and give an introduction to the system and the thesis research. The student should consult with his or her mentor in order to agree upon how extensive a historical review is appropriate to the Dissertation.

ii) *Manuscripts:* The body of the Thesis should be in the form of manuscripts that have been or are ready to be submitted for publication in a scholarly journal. Note that the format and style requirements described above must be adhered to for each and every chapter of the Dissertation. Each manuscript will constitute a chapter and will include a brief Introduction, Methods and Materials, Results, and Discussion. The candidate must be the first author of these manuscripts and must be responsible for their preparation. A footnote to the introduction must give bibliographic information for manuscript constituting the chapter.
This information should include the full names of the authors, institutional affiliations, the journal and the status of the manuscript (i.e., submitted, published or in press)

iii) Separate Chapter for Unpublished Data: If the student is not first author: One of several options may be appropriate in cases in which the student is not first author of a manuscript that is to be presented in the Dissertation as a chapter: 1) The student may extract his or her own work from the manuscript for presentation in the Dissertation; 2) The manuscript may be included as an appendix to the Dissertation; 3) The manuscript may be included as a chapter if the student was responsible for the preparation of a significant portion of the manuscript. For all multi-authored manuscripts, the exact contribution of the student should be stated in an introductory statement or footnote preceding each chapter or in the appendix. If figures from a multi-author manuscript are used, it is imperative to indicate which figures are the student’s works and which represent the work of other authors. In all cases in which figures are used, appropriate acknowledgement must be given. In addition, any contributions of co-authors must also be specified in the acknowledgment section.

Wherever pertinent, coworkers and helpers and other contributors should be acknowledged in the body of the text.

iv) Conclusions: A Dissertation should end with a general discussion of the studies that have been conducted including an assessment of the significance of the research, arguments of interpretation, evaluation of material included in appendices, and a plan for the experimental resolution of unanswered questions.

The following sections of the Dissertation are common to both formats:

i) Title Page: The title page is to list at the top the title of the Dissertation, student’s full name and signature, the full name and title of the Thesis mentor (and Co-mentor, if applicable). At the bottom of the title page, the following statement should be included:

Submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Biomedical Sciences

Albert Einstein College of Medicine

New York
Month yyyy

The month and year on the title page is the month and year of the thesis defense. A sample title page is shown at the end of this Section.

ii) Abstract: The abstract of the Dissertation is to include: a hypothesis, the procedures followed, the significant results and the general conclusions. The abstract is to be presented on a separate page headed with the word ABSTRACT in capital letters centered on the page. On the next line is the title of the Dissertation. The following line is the full name of the student. The length of the abstract must not exceed 750 words.

iii) Acknowledgments: This feature is not required, but offers a convenient opportunity to express the writer’s appreciation to persons who have been especially helpful or to the publishers of materials from which data
have been drawn and to whomever else acknowledgment should be given. The appropriate training or research grants should also be acknowledged in the Dissertation.

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New York

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by

Yun-Ruei Christine Kao

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Yun-Ruei Christine Kao

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