INSTRUCTIONS FOR THE PREPARATION OF THE SENIOR THESIS 2017/18

IMPORTANT DATES:

THESIS PROPOSAL WORKSHOPS:
WEEK of June 5 - 9

THESIS PROPOSAL DUE:
WEDNESDAY, JULY 12, BY 3PM

THESIS INTRODUCTION WORKSHOPS:
EARLY TO MID OCTOBER

INTRODUCTION AND OUTLINE OF FIGURES AND REMAINING SECTIONS:
FRIDAY, DECEMBER 1, BY 3PM

FIGUREMAKING WORKSHOP
AVAILABLE FOR VIEWING DURING WINTER BREAK

STORYBOARDING WORKSHOP
WEDNESDAY, JANUARY 17

PENULTIMATE DRAFT OF THESIS:
THURSDAY, FEBRUARY 15, BY 3PM

PDF of FINAL THESIS:
FRIDAY, MARCH 9 BY 3PM (OR TUESDAY, MARCH 20 BY 3PM)

******MARCH 20th IS A FIRM DEADLINE AND EXTENSIONS WILL NOT BE GRANTED*****

Your thesis will be evaluated by two readers: one will be a member of the Board of Tutors, and the other an outside expert in the field of your research recommended by your faculty sponsor. Your faculty sponsor will also evaluate your work. During the third week in May, your thesis will be returned to you with your final grade for the course and the readers' comments.

You will also provide a hard copy to be bound and shelved in the Tutorial Library. In order to alleviate the stress of last minute printing, we do not require this hard copy until after the final deadline for the thesis has passed, which you will turn in electronically. This hard copy (printed single-sided on regular photocopy paper – which is all acid-free) should be handed in to the concentration office before Commencement. On Thursday, March 22rd, we will host a Hard-Copy Hand-In celebration for thesis writers, and you can deliver it to us then.

Your faculty sponsor and tutor can provide helpful feedback on your thesis outline and drafts. You are responsible for sending them your work directly on each deadline date listed above, and to schedule time to talk with them about your progress and writing throughout the year. **This process of early review is important: you should make every effort to take advantage of it.**

Thesis Preparation: Because of the wide variety of research projects students in these concentrations pursue, we do not have stringent formatting requirements for the thesis; we want each thesis to represent its author's unique scientific research experience, and we do not want you worrying excessively about formatting. A few important formatting guidelines are included at the end of this document; please read them carefully.

Most theses are about 50 pages in length and contain 8-12 figures. We maintain a library of former theses in the Tutorial Library, and we encourage you to come in and browse through them to get a sense of the choices your peers from previous years have made.

Regarding the structure of your thesis, it must include:

- a **Title Page**,
- a **Statement of Research**,
- an **Abstract**,
- an **Introduction**,
- the **Presentation and Discussion of Results**, following the format outlined below, and
- **References**

Statement of Research: The statement of research appears as a full page after the title page and indicates under whose direction the work was performed, the department and institution, and the period of time spent on the research. If you performed the research in collaboration with others (for example, a post-doc of graduate student) you must explicitly state which data were generated either completely by someone else or in collaboration with someone else. (You should also reiterate collaborative work in the text of your thesis and the figure legends. Don't leave the readers guessing which work is yours!)

Abstract: The abstract should be less than one page and should summarize the problem or question, hypothesis, main results, and conclusions.

Introduction: The introduction should be a concise survey of the field, generally 8-12 pages in length. It should summarize the important questions and show how your work relates to them. Make clear the goals of your research, and remember that only rarely is it possible to provide definitive answers in the time available for doing a senior thesis.

Presentation and Discussion of Results: For the presentation and discussion of experimental results, follow the format of a suitable journal in the field of specialization of your thesis. It is generally appropriate to have a **Methods** section, giving the details of how particular procedures were carried out, a **Results** section, in which experimental data are objectively presented, and a **Discussion** section, for interpretation and analysis of these data.

- Often, negative results must be reported. Be critical in analyzing them and in discussing the experimental design.
- Conclude, where appropriate, wit comments on the direction of future studies.
- Explicitly credit the work of others! Because undergraduate research projects often relate closely to the ongoing work of other undergraduates, graduate students, and post-doctoral fellows in the laboratory, **it is particularly important to give explicit credit to other collaborators and to reference any research, data, figures, or text that were obtained or produced by someone else**. Most of the research, results, and conclusions presented should be your own.

References: We recommend that you use the reference format used by the journal Cell. If there is some reason why you prefer to use the format for another major journal in your field, that's OK but you must be consistent with all your references. You must use (author, date) in-text citations, and the references should appear at the end of the thesis in the "reference cited" section, not as footnotes. We strongly encourage you to use reference management software, which will save you many hours of busy work

Format of the Hard Copy:

- The thesis should be double-spaced on 8 ½ x 11" paper, with a 1 inch or 1.25 in margin on all sides. Copy machine paper is fine (you don't need to purchase special thesis paper.)
- Do not punch holes in the paper. Do not bind your thesis, we will do that for you.
- All figures, drawings, and photographs should be clear and legible.
- Figures can be integrated into the main text of your thesis or appear at the end of the document as is commonly done with journal manuscripts. Readers generally prefer that full page figures be integrated in the text.
- Because text wrapping can cause serious problems, we strongly recommend full page figures.