

# MSBI Research Projects

## BI 215 – Supervised Research

### Approval Requirements:

- Submit the following *prior* to March 30, 2012:
  - Faculty member (or industry alternate) supervising the project along with the members of your thesis committee (total = 4); members of your thesis committee must be UCSF faculty members.
  - Title of research project and a one paragraph (half-page) summary identifying the hypothesis, scope, and projected endpoint(s) of the proposed research project.

### Course Evaluation:

- Formalized report and faculty evaluation will be used for grading.
- For non-thesis students, the research report should be no more than 4 pages (single spaced, 11-point font, 0.5" margins) and include the specific hypothesis that you tested, relevant background, methods, results, discussion and conclusion. For thesis students, this report should adhere to the same page limit, but be a preliminary framework for your thesis (emphasis on introduction, anticipated methods, preliminary or expected results). At the end of the spring quarter, thesis students will undergo a "qualification examination", which will present/defend their planned summer research, while non-thesis students will undergo a "comprehensive exam", which will be a defense of their spring research project. Reports are due June 8, 2012 and examinations will be the week of June 11-15.

## MSBI Thesis Option

### Approval Requirements:

- Completion of BI 215 with an acceptable progress report
  - Title of ongoing (or, with approval, new) research project
  - Faculty member (or industry alternate) supervising the project
  - Completion of a qualification examination

### Thesis Requirements:

- The final thesis should conform to the following guidelines:
  - Page limit of 30 pages (double-spaced, 12-point font, page numbering)
  - Page Margins: Left – 1.5", Right, Bottom, Top – 1" (US Portrait Letter pages, 8.5"x11")
  - Content (see UCSF guidelines for complete details)
    - Title Page** (standardized - template to be provided, page i)
    - Copyright Page** (standardized - template to be provided, page ii)
    - **Dedication and Acknowledgements Page** (page iii)
    - Abstract** (title and name should appear at top of page – 350 word maximum, page iv)
    - **Table of Contents, List of Tables and Figures** (page v)
    - Introduction** (include motivation, present state of research, and project goals; page 1-)
    - Methods** (include detailed description of all equipment, imaging methods, mathematical justifications, processing tools, etc.)
    - Results** (include pertinent results only from data acquired as part of this research project, utilize figures and tables to effectively convey findings.)
    - Discussion** (place in context the meaning and impact of your results, address the limitations of your findings, possible alternate interpretations, and provide recommendations as to how the research should progress in the future.)
    - Conclusion** (make a very clear and concise summary of the findings of your research; speculation on impact and required future investigation is also appropriate.)
- Research is expected to run June 18 – August 17, allowing you 2 weeks at the end of August to complete your thesis (due August 31, 2012).