Presentations to the Supervisory Committee

Mission

Supervisory committee meetings are an important and essential component of the graduate education. The committee is charged with ensuring that the individualized and integrated education and research plan devised by the mentor and student is appropriate; that the student makes a significant intellectual contribution to science and performs high-quality research; that the highest ethical standards are adhered to; and that reasonable progress is made toward program, career, and life goals during all stages of the graduate education.

Preparation for Advisory Committee Meetings

In this order:
1. Review the thesis aims (note any changes in research direction)
2. Review the minutes of the previous meeting
3. Review your data and discuss all data with mentor
4. Complete the meeting agenda form (attached)
5. Have your mentor review the agenda and add items, if needed. Denote additional items using the mentor’s initials.
6. Generate a formal presentation according to the guidelines provided below
7. Obtain mentor’s feedback on the presentation
8. Send the agenda initialed by the mentor to the committee at least one week before the scheduled meeting. This means that your presentation should be ready at least two weeks before the scheduled committee meeting to give your mentor time to review it.

Preparing for the presentation

1. Use the agenda form as a guide to prioritize the information you wish to present

2. Focus the presentation on only significant and important findings and issues
   - Do not provide extensive discussion of side projects
   - Do not show the twenty western blots you performed when a single blot containing the relevant controls and experimental points could be shown
   - Do not show endless histological or immunofluorescence images – choose carefully. A picture may be worth a thousand words, but a thousand pictures often have little value in a presentation.
   - All data shown should either contribute to a strong conclusion or should illustrate an important caveat or experimental problem. Do not present data just to show how hard you are working.

3. Practice, but do not attempt to impress the committee with a highly polished talk
   - Do not gloss over or hide problems with the experiments or with the data
   - Do not over-interpret data
   - Admit caveats and address them appropriately
   - Consider alternative interpretations and models
   - Be willing to say, “I don’t know”, but accept accountability and find the answer immediately after the meeting.
   - We all make mistakes. Learn from them and don’t repeat them. Biology humbles even the sharpest minds.
STRUCTURE OF THE PRESENTATION
First Committee Meeting

Objectives

- Introduce yourself to the committee – include some biographical information, your career goals (or what options you are considering), and classroom achievement. A discussion of your IDP should be included in this section.

- Introduce the proposed research topic (likely to be broadly defined at this stage)

  Convince the committee that the proposed area of research is important

- Demonstrate to the committee that there are important questions to answer to advance science in this area (you might not be able to articulate a defined hypothesis at this stage)

- Provide the committee with a general experimental approach and rationale for how you plan to address these questions,

- Show that you have the tools and resources to experimentally address the key questions. Distinguish between preliminary data from others and the preliminary studies YOU have performed. Include preliminary studies you plan to perform in the next six months.

- Propose a plan for additional coursework

- DECISIONS: committee should approve the general research topic, program of study, and advise on preliminary data needed to fill holes in knowledge

The Talk (15-20 slides total)

Slide A: Brief Bio

Slide B: Past/current courses and proposed future courses

Slide C: What is the clinical problem addressed by the research?

Slide D: What is the prevailing model(s) that guide research in the field? (Use diagrams!)

Slides E1 – En: What background information/preliminary data is needed to understand the models, to determine the caveats of the models, and to identify the gaps in knowledge or technical capabilities that need to be filled? (10 slides maximum)

Slide F: What will you add to the model, how are you challenging the model, or what technical capability will you contribute? What is the rationale for pursuing these studies rather than alternatives? What knowledge will be contributed by your work, if successful, and how will that advance science and medicine? (Diagrams, rather than text, are very helpful!)

Slide G: What data or technical capabilities do you need to acquire to test your new model or to achieve the research goals?
Slide H: What is the experimental plan for acquiring this information? Note: these studies should generate the preliminary data for the Comp. (Flow diagrams are very useful here!)

Slide I: Specific goals and milestones for the next six months.

Subsequent Committee Meetings

OBJECTIVES

- Review your aims
- Highlight important new data in the literature that directly and significantly impacts your research.
- Present new data generated in studies related to your thesis topic (do not waste time detailing progress on side projects or unrelated collaborations). Interpret the data and explain how this information alters your model and leads to new questions/research directions.

  Address significant technical problem or other challenges you have encountered that have affected productivity or progress toward completing your studies.
- Provide timelines for publishing manuscripts, writing review articles/book chapters, and presenting at local and national meetings.
- Maintain dialog regarding your career plans and obtain advice for achieving your career goals. Review changes in your IDP assessment.

  NOTE: By the beginning of year 5, this discussion should be very specific with respect to potential career paths, postdoctoral laboratories, companies, teaching opportunities, etc. DO NOT WAIT until you are writing your thesis to begin making concrete plans for your future!

- DECISIONS: Specific aims should be approved in the committee meeting that immediately precedes the Comprehensive Exam.

The Talk (15 slide maximum)

These meetings should take a maximum of one hour. Slides should be used to illustrate ideas and present data, but should not dominate the meeting. The meeting should be a discussion between you and the committee. Expect to be interrupted frequently and anticipate that the discussion might not follow the path of your slide presentation. Therefore, you should thoroughly understand your work and the literature, and the implications of these findings, rather than memorizing a set presentation.

Sample Talk Format:

  Slide 1: Introduction – Model and aims (A diagram illustrating both is very helpful!)

  Slide 2: New information from the literature that alters the model or affects interpretation of your previous findings. Update the model or interpretation.
Slide 3: Summary of milestones and goals from previous meeting, including questions posed by the committee but not answered in the previous meeting. Briefly discuss how these were addressed or will be addressed in this presentation. If specific questions were not successfully addressed, explain why not.

Next slides: Data addressing specific aims. For each aim (3-4 slides max):

a) What is the aim and briefly (verbally) what did you previously achieve (described in detail in the previous meeting)? What new questions did you ask or what new hypothesis did you test since the previous meeting?

b) What approach did you use and what data was generated? How does the data answer the question or test the hypothesis?

c) What are the caveats of these experiments or what problems are you having with the experimental methods? What is the next step?

Final three slides:
1) Goals, milestones, and timeline for next six months
2) Problems that need to be addressed by the committee
3) Career development discussion
Supervisory Committee Meeting Agenda
Submit to committee one week before the scheduled meeting

Thesis title/topic:

Student:

Year/Target Graduation Date:

Meeting Date/Time/Place:

Mentor: I approve this agenda __________ and I have critiqued the presentation__________.

Address the following topics using concise and bullet-pointed responses.

1. Meeting Objective(s):
   (include specific decisions that must be made by the committee or advice you need from the committee)
   •

2. Summary of milestones and decisions from previous meeting:
   (Reminder: attach detailed minutes of previous meeting)
   •

3. Progress since last meeting:
   (Include research findings, meetings attended, courses completed, and significant presentations/awards/certifications)
   •

4. Goals, milestones, and anticipated progress for next six months:
   (include a timeline for achieving these results)
   •

5. Problems/issues/concerns (related to project(s)/program/career/etc):
   •

6. Progress on career objectives and the IDP plan:
   •

7. Other research or educational activities (eg. collaborations/side projects not directly related to the thesis aims, certification programs in progress):
   •