

Preparing for the A Exam in MBG

Advice from Current Students

Getting Started:

- ✓ BMCB, GGD, and Biophysics policy is that you take your A Exam **by the beginning of your fifth semester** (September 15 of your third year).
 - This is earlier than the deadline set by the Graduate School - talk to your committee if there are extenuating circumstances. They have *some* leeway to extend this deadline.
- ✓ **Get your committee to agree on a date** for your A Exam before you start writing. Anticipate that it might take a couple tries to find a time that works for everyone.
 - Your PI or committee members may be traveling in the lead-up to your A Exam and be less responsive to emails. This is a good thing to know ahead of time.
 - You need to have **one faculty member who is not a member of your committee** present at your A Exam. It can help to identify a couple potential people in case one is very difficult to schedule with.
- ✓ **Discuss a timeline with your PI** early on. They can help you to break things down into concrete steps with intermediate deadlines.
 - Your PI is allowed to read and give feedback on your draft **once** throughout the process. Agree on a deadline to submit that draft before you even start writing.
- ✓ You should plan to work on your A Exam for **approximately 8 weeks**. This includes reading background literature, writing your draft, getting feedback on your draft, and giving a practice talk.
 - It's a good idea to start thinking about when you want to have the A exam by mid-spring semester of your second year so you can figure out when to start the 8-week countdown.
 - When you plan out your timeline, make sure you leave **buffer time** for people to read your draft. They are not going to drop everything to give you feedback the minute you send it to them.
 - You will need to submit your final proposal to your committee **7 days before your A Exam**. Include this in your timeline.

Reviewing the Literature on Your Topic:

- ✓ Keep a list of papers you think are relevant to your project and check them off as you read them.
- ✓ One of the best places to look for papers to read is other people's reference lists:
 - Ask the other members of your lab for the reference lists from their A Exams.
 - Look at the papers that were cited in your lab's recent publications.
 - Compare the reference lists for several recent reviews in your field - which papers overlap? Those are likely important.
- ✓ Be realistic about how many papers you can read *thoroughly* at a time. This is specific to you, but you probably can't read papers all day and retain anything from them. (Be honest.)
- ✓ Take notes/write summaries as you read papers. It will be much faster to re-read your own notes than to re-read the whole article again.
- ✓ Pay attention to the methods used in papers. Your committee will ask you about them.
- ✓ Make sure you are reading both foundational papers in your field (including the older ones) as well as keeping up with the very recent advances related to your project.

Writing Your First Draft:

- ✓ Nobody writes a perfect first draft. **Anticipate and plan for writing multiple drafts.**
- ✓ **Be realistic about the scope of your project.** It is really tempting to write an overly-ambitious proposal but your committee wants to know that you know what is feasible.
 - Break down a big question in your field into smaller, specific questions. Think about the simplest experiment to give a clear answer.
 - You may get feedback that you need to remove a sub-aim (or even a whole aim) that you really love. The other person is probably right.
- ✓ You do not need to include every single detail in your proposal - you won't have space anyway. Think critically about what is necessary to understand the proposed work, what you can assume a reader knows, and what is readable.
- ✓ **Think about how your proposed work will divide up into manuscripts.** How many papers do you think you will get? What will be in those papers? Will you publish them all at the end of your PhD or could you publish one sub-aim partway through?
- ✓ The guidelines for the three Graduate Fields are slightly different regarding the written proposal. Make sure you know what the expectations are for your Field.

Getting Feedback:

- ✓ **Ask for feedback on your draft(s). Seriously.**
 - Lab members are a great resource, especially post-docs in your lab. They can suggest relevant papers, techniques to consider, pitfalls of your proposed work.
 - The members of your lab are also unusually familiar with your project and the methods you are writing about - much more than your committee is. **Make sure you also get feedback from people outside your lab.**
- ✓ You are allowed to ask anyone for feedback, including faculty. Don't shy away from asking your committee members, other faculty members, even your undergrad PI for advice. **Just make sure the final product is your own work.**
- ✓ **Give people at least a week to read your draft.** You should anticipate that some people you ask will be too busy (and may or may not actually tell you "No").
 - It is best if you can give people time over the weekend to read (i.e. don't send it to them on Monday and hope for feedback by Friday).

Giving a Practice Talk:

- ✓ **Give a practice talk.** It is good practice and will likely make you feel less nervous.
 - The week after you have submitted your final proposal to your committee is a good time to do this.
- ✓ **Invite people who you think will give you good feedback**, not just your closest friends or members of your lab.
 - Invite people who know how your committee members think and what kinds of questions they tend to ask - like members of their labs and people who share committee members with you.
 - Invite people who you know will challenge you and ask hard questions.
- ✓ The MBG Diversity Council members are very willing to attend practice talks! Please feel free to reach out to Dashiell (dm792) or Mariela (mn548) and we will find people to come.
- ✓ Make your practice as similar as possible to your real exam.
 - Try to reserve the same room you will use for the real thing.
 - Present the slides you plan to use. Get feedback on whether the slides are neat and clear, with a large enough font. **Too much information on a slide is worse than too little.**
 - Make yourself practice drawing any "chalk talk" elements that you plan to include.

Taking the A Exam:

- ✓ Get some sleep the night before!
- ✓ You should bring a printed [A Exam Results Form](#), a copy of your transcript, and copies of your written proposal (even though your committee will probably bring their own copies).
 - You do not need to bring coffee or food for your committee. This can be a logistical and financial burden - and you don't need any more stress on the day of your A Exam.
- ✓ Remember to breathe! Your committee is on your side and wants to see you succeed, even if they are challenging you. They are not out to get you.
- ✓ It is ok to ask for a bathroom break or a short breather if you want to step out and calm down for a minute.
- ✓ Your committee is interested in asking you questions to assess your knowledge of your project. They are not expecting to hear an uninterrupted presentation of your proposal.
 - The amount of preliminary data you have is less important than your ability to explain your proposed project and to interpret your data in a logical way.
 - Be open to models/questions/concerns that you have not considered and think through them with your committee.
 - Be ready to talk about how you would interpret different potential results of your proposed experiments, and how you would follow up on them.
 - Know the limitations of your proposed methods, and be prepared to discuss which questions your project will **and will not** be able to answer.
- ✓ If you don't know the answer to a question, **do not make something up**. It is ok to say that you don't know something - just be honest about it. You can also speculate about it and explain to them why you're making the hypotheses you're making.

Outcomes of the A Exam:

- ✓ Your committee will decide on the outcome of your A Exam immediately after you finish. You will wait in the hallway while they make a decision.
- ✓ It is fairly typical to be given a “conditional pass,” which means your committee wants you to do additional work before allowing you to pass.
- ✓ Some examples of “conditions”:
 - An additional course on a relevant topic
 - A 1-2 page annotated bibliography of relevant papers relating to a sub-aim that were not cited in the proposal
 - Restructuring or expanding an aim to provide greater detail on the methodology or analysis plans
 - Reorganizing the introduction to improve clarity

Logistical Information:

- ✓ You must submit a [Schedule A Exam Form](#) at least 7 days before the A Exam. The Graduate School is very strict about this deadline.
 - This form is signed by your committee members, the DGS, and one of the GFAs.
 - The additional faculty member (not on your committee) does not need to sign.
 - Get the GFAs to sign your form last - they can submit your form for you.
 - There is no reason not to submit this in advance so you don't forget.
- ✓ You must submit the final proposal to your committee at least 7 days before the A Exam.
- ✓ You must submit the [A Exam Results Form](#) within 3 days after the A Exam.
 - **Bring a printed copy with you to your A Exam.**
 - This form is signed by your committee members, the DGS, and one of the GFAs.
 - The additional faculty member (not on your committee) does not need to sign.
 - Get the GFAs to sign your form last - they can submit your form for you.