

## Preparation for chalk talk

The three most important things about chalk talk:

1. Clearly know what you are going to do and you should have thoroughly thought about the whole picture of your research program.
2. It is as (or more) important as your seminar.
3. Practice!!!

The chalk talk aims to show that your future research is **achievable, fundable, and suitable for you and the department.**

If possible, try to sit in as an observer in real chalk talks (even not closely related to your field). → a great way to learn DOs and DON'Ts for chalk talks

- Ask the department about the format of their chalk talk (time length, white board size, powerpoint slides allowed?)  
Sometimes, it works better without powerpoint → for the committee, chalk talk is a good way to see you how you can effectively deliver ideas and knowledge)
- Usually ~1-1.5 hour, after your seminar (same day or next day)
- Your research statement is your blueprint
- State the “Big picture” of your research (The big problem you want to solve) at the beginning
- Briefly refresh the key findings of your seminar and how they bring you to the current stage (sometimes, some people might miss your seminar. So it is good to have a brief summary)
- Aim1 and Aim2 are your one-two punch! Aim3 can be more explorative/risky.
- Time distribution: Aim1 (~50%), Aim2 (30-40%), Aim3 (10-20%)
- Aim1 is your best project. You are 100% confident that you can make it work and you have all the skills/tools. Even already have preliminary data for grant proposals. Definitely publishable when the project is finished.
- Aim2 is separate from Aim1, but also promising. Might need some time to accumulate more preliminary data.
- Aim3 broadens your research program in 5-10 years. It can be a long-term project and a bit risky.
- A good time to name potential collaborators inside or outside of the department and how you are going to collaborate
- Practice your writing (clear and readable) on a white board
- You can write the three aims on white board before the chalk talk starts (usually they give you some time to write at beginning)
- Bullet points of the subaims
- Draw a model of your hypothesis if you have one that will help you explain your theory/hypothesis
- Write simple/clear points → you don't want to spend too much time on writing and showing your butt to the committee → write by standing on the sideways/try to face the committee as much as possible

- Draw your graphs/illustrations for preliminary data (if you are not using powerpoint) in a simple way
- Have mock chalk talk with PIs who have different backgrounds
- You want the PIs give you a hard time at the mock chalk talk → challenge your ideas, make sure you have thoroughly thought about your proposal
- Control the pace of discussion, you don't want to get stuck on Aim1
- There is always a chance that an "unfriendly" committee member might intimidate you. So be prepared for this situation. Learn how to convert/change the course of discussion (ex: this is a good suggestion, I will consider it. Let move on to the next subaim...)
- Talk in a calm and steady pace (with excitement, of course. You are **SELLING** your science).
- **Don't** raise voice or talk too fast when they challenge you.
- Vigorous and friendly discussion/idea exchange is a good sign!
- Be open-minded to suggestions/comments
- Be confident but not arrogant. Let people finish their questions!
- Make eye contact with the committee. Engage your audience.
- Bring your own markers  
3 colors. But not too many that you cannot hold them in one hand because you don't want to spend time on finding markers from the other side of the white board.  
Also, with 3 markers in your hand prevents you from playing the cap (repetitively open/close) → a sign of anxiety
- Also practice with your labmates → chalk talk should be like talking/discussing with your colleagues
- Chalk talk is also an opportunity for the faculty to see whether you can get along with them. The way they ask/discuss questions with you might be the way the faculty discuss their science in the department. They are observing you and you are observing them.
- Common questions (not related to science)
  - Which project is your first RO1/publication?
  - Your 3, 5, 10-year research goal?
  - How many people you plan to have in your lab (be realistic! Usually 3-5 when you start)? How do you allocate your people on the projects you proposed?
  - Where is your funding opportunity? NIH (NIAID, NCI, NIGMS)? NSF? Other societies? (tell them why your project is suitable for certain agencies)