

### How to give a successful chalk talk for academic job interviews

All opinions below are my own. I went on the academic job market in 2017-18 and interviewed at ~7 institutions including liberal arts colleges and public/private R2/R1 schools.

Your chalk talk is usually an overview of your research program/first grant submission as a PI. It should therefore include:

- Overall goal of the research/focus of your laboratory.
- Specific Aims/questions. You want to be ambitious but reasonable; like a grant.
- Plans for timing, papers, hiring. Who will do the research and what is the tangible output of your research? When do you expect publications?
- Future directions. Most of the chalk talk should be the research plans for the next ~5 years (the length of a standard NIH grant). But throw in a couple of points at the end to illustrate the long-term trajectory of your research program.
- Impact. How will your research program advance the field?
- Discuss mentoring/outreach opportunities, but keep your audience in mind: do your future colleagues in this particular department value such endeavors? If not, keep this discussion minimal.

Before the interview:

- Ask your contact at the institution what they expect:
  - Often your chalk talk will be after your research seminar. Ask for the tentative schedule of events beforehand.
  - How big is the room? Will you have a chalkboard or a whiteboard? Some interviews will offer you slides. Will you have a few minutes before you start to write on the board? Who will attend (e.g. are postdocs/graduate students invited?)?
- Know your audience! Often a search committee will use the chalk talk to evaluate your teaching capabilities. Can you tailor highly specialized research to be accessible to people outside of your area of expertise?
- Prepare for ~40 minutes if you are allowed an hour; expect that people will interrupt with questions.
- Do a practice chalk talk in front of people you trust who will give you honest feedback. This is SO uncomfortable, but will make your talk so much better! The more practices the better.
- PRACTICE! Alone and in front of people. Record yourself and then watch your own talk to see if you do anything distracting or embarrassing.
- Tip: at home, use dry-erase markers on a bathroom mirror!

When planning your talk: **Do:**

- Preview your chalk talk at the end of your research seminar! This works well if the seminar comes before the chalk talk.
  - Imagine there are some people who cannot make it to your chalk talk.
  - Give just the highlights of your chalk talk. Maybe 3-5 slides total.
  - This has the added benefit of repetition: those who do make it to your chalk talk will think: oh I've seen this before, yes, yes, very good!
- If you can, get to the room 10 minutes in advance, write an outline on the board or draw the more complicated pictures. If you can draw a picture/graph in advance and then reference it over and over, you've saved valuable time!
- BRING YOUR OWN WHITEBOARD MARKERS. Those they supply may be dried-out/stupid colors.
- Give a brief overview of your seminar before you begin your chalk talk.
  - "As a postdoc I discovered XYZ" (keep it brief)
  - On the board write the big pictures and remind your audience that these are published stories:
    - X (Rieder, 2015)
    - Y (Rieder, 2017)
    - Z (Rieder, 2021)
- Most faculty will try to attend both seminar and chalk talk, but assuming prior knowledge is a great way to lose some people from minute 1.
- Structure your chalk talk in "modules" in case you don't finish. Put the most important information first, if possible. Don't leave it till the end!
- Consider using a "home diagram" on one side of the board that you update as you go to show how all of your aims/research projects fit together.
- Highlight your previous publications/grants/breakthroughs. Show them you have a track record of awesomeness.
- When using the board, draw pictures, use bullet points. Use the drawing/writing as an opportunity to pause your monolog. You don't have to talk all the time, even if silence is scary.
- Specifically reference planned grants and publications. To which institute will you submit your R01 (or similar)? What is the first publication that you anticipate?
- Mention specific hypotheses: "Based on these preliminary data, I hypothesize X. I will test X through Y experiment, which is an excellent first project for an incoming graduate student in the Z program."
- Mention how long you expect certain aims/experiments to take. Remember that this should outline your first 5 years, not your entire career.
- Mention who can work on aims/experiments: why is this suited for a student/postdoc? How will this aim lead to the involvement of undergrads?

- **\*\*Bonus if you can use part of your research in your classroom teaching\*\***
  - This is important at some institutions and not at others; know your audience.
- At the end of each module/aim, summarize it for people who got lost in the details. Remember that your audience is smart, but often not all of them are experts in your field.
- Place your research in the context of the broader field.
- Say “I don’t know” in response to a question (when appropriate). Even better: “I don’t know. We should collaborate and find out!” (only if appropriate).
- Be excited about your research--it will come across and your audience will also be excited! Smile. Joke a little if it feels natural, but stay professional. Even the most exciting research can be boring if delivered in a monotone.

When planning your talk: **Don’t:**

- DO NOT USE NOTES! One page in front of you might be ok, but the fewer the better. This is stuff you should know by heart.
- Don’t assume everyone made it to your research seminar!
- Similarly, don’t assume people are familiar with your study system. Why use this cell line/technique specifically?
- Don’t use complex jargon and avoid acronyms as much as possible! Not everyone in the audience is a specialist in your field. How many new terms can *you* hold in your head at once?
- Don’t assume you will get through your entire planned talk (see “prepare modules” above).
- Don’t name-drop (unless it’s one of your own papers).
- Don’t get flustered when people point out flaws or ask difficult questions.
- Rephrase difficult questions: “If I understand your question correctly... does that answer your question?”
- Don’t point out when you already answered a question. Be polite. Just answer the question again.
- Don’t allow long discussion tangents. Your host may gently bring the discussion back to your talk, but if a tangent has gone on too long, figure out a way to gently bring it back on topic (you don’t want to run out of time!):
  - e.g. “I think that’s a really good point, but I have so many more ideas I want to get through. Can we return to that idea at the end, if we have time?”

**Most important two tips:**

1. Get as much constructive critical feedback as possible. Listen to it.
2. Practice. In the shower. In the car. To your cat. Practice.