Hargreaves lab tips for making and giving presentations

Presentations matter. Not to stress you out, but early in your career you should be treating every talk as important. You are making an impression on a group of colleagues who probably don't have that many chances to form impressions of your work. It is not unlikely that someone in the audience will have to judge the quality of your work at some point. If you are a grad student people in the audience will be evaluating you for departmental awards or future grad positions. If you are a post-doc you should treat every talk as a job talk (and treat an actual job talk like the most important thing you will be doing that month). Also, you're pouring your heart into your research (hopefully) and you want other people to be excited about it too!

Know thy projector

If possible find out about the projector you'll be using:

- Does it show 4:3 or widescreen format?
- How big is the screen vs room? What level of detail (eg font size) can the audience see?
- How good is the clarity / contrast / resolution (any colours the audience cannot see)?
- Does it cut off parts of the slide?

If you're not sure, play it safe

- Assume no one will be able to read main points <24 pt, and less important points (eg citations) <20 pt
- Assume no one will be able to see light colours (eg cyan, yellow) on white background
- Assume it cuts off at least one side and leave a border of white space around all slides just in case

General tips

- If you have to apologize for a slide/image/figure DO NOT SHOW IT
- If a figure matters you will have to remake it from the version published in a paper/thesis. What works in print usually has to be simplified for screen

Timing and length

- If you have a 1 hr time slot prepare a 40 min talk. Leave time for the talk to start late, for someone to introduce you, and for questions at the end. No one can really pay attention for >40 min anyway
- Know where you should be at 1/3 and 2/3 through your talk. If you realize you are going over time DO NOT JUST SPEED UP cut something out (e.g. skip a slide). Know in advance what you can skip
- Conferences: Talk to the moderator to make sure you know exactly what the timing signals are. This often varies by moderator (eg does '3 min left' mean 3 min until you're supposed to be done in time for questions, or 3 min until you start stealing the next speakers time?)
- If you are at the end of your time but not yet finished, wrap up the slide you are on and go straight to your conclusions slide. You want to end with strong take home message that

people have a chance to absorb. If you start rushing through your last slides a) no one is listening at that point, b) they will likely forget everything you told them before as well.

Slides are a visual medium

- If your audience is reading, they are not listening.
- Minimize text. Use a title that states the important conclusion of the slide, and otherwise just enough text for the audience to follow along. If you need a memory crutch use presenter view (power point), not text on the slides
- Slides should be clear, simple, and visually appealing
- Animate. If you need to show a complex picture (or really need bullet points), build it up via animation don't throw the whole thing at your audience at once and then spend 5 minutes explaining. Eg show the axes first, before you show the data. Or show a predictions slide then (keeping the axes the same) the data. Or show some of the data first then add the next piece etc
- Use colour. Why show a black and white figure in a talk?
- Use 1 font and at most 3 font sizes (maybe 4 once you count figures) in the talk
- Keep font size consistent headings always size x, main points always size y, references always size z
- In fact, keep all formatting as consistent as possible

Know your audience

Pitch your talk for your audience. If you are in a symposium on evolution at range edges, spend less time than normal convincing people that evolution at range edges matters. If you are giving a public talk, spend more time than normal explaining clearly why evolution at range edges matters.

Be kind to your audience

It is your job to make their job as easy as possible. Take every possible opportunity to make it easier for them to follow along, and to figure out what is going on if they zoned out for a few minutes. Examples:

- Number your slides. Makes it much easier for your audience to ask questions
- Whenever possible pick a colour scheme for data and stick to it throughout the talk. Eg red for species 1, blue for species 2
- Whenever possible have reminder clues on every slide. Eg a blue and red silhouette of species 1 and 2, or legends
- Simplify simplify. Especially text. Eg axes labels, legends.
- Avoid acronyms they are almost impossible for your audience to remember. Instead choose a single word that can serve instead
- Wrap up each section of your talk with midway conclusions if appropriate

Public speaking

- Figure out if you have a 'verbal tick' – a word or phrase you say without even knowing it. The most well known is 'like' but an especially bad one (that I used to [hopefully] have) is 'sort of'. If you're not sure ask your audience when you practice. If you have one work to get rid of it.

- Avoid saying statements as questions (ie raising the pitch of your voice at the end of a sentence). Makes you seem unsure and at worst can be confusing
- Practise practise practise. Even if you 'hate memorized talks' if a talk comes across as memorized they have just not practised it enough. Not memorized is not the same as unrehearsed. Your audience is giving up precious time to listen to you don't take them for granted.
- For a short talk (12 min or less) this is especially true you do not have time for unplanned tangents or bumbling explanations. You need to know what you are going to say for every slide
- Have a memorized script for your first 3 slides this will get you through the nerves
- Transitions are key getting from one slide to the next is the trickiest part and the one you're most likely to blank on.
- Don't fidget eg jingle coins in your pocket, play with your pen/hair/laser pointer etc.

Don't assume

- Don't be that annoying person that says 'we all know the equation for the Lotka-Voltera model' or 'I'm sure you're all familiar with Structure plots...'. You may be up to your eyeballs in a topic but I guarantee you at least one person in the audience has never heard of it or has forgotten it completely from the last time they did.
- Don't assume it's obvious to anyone else why your topic is interesting. People who study charismatic animals are especially prone to this problem but it is true across the board. It is your job to make your audience see why the broad topic is interesting and why your specific much smaller contribution is also interesting
- Don't oversell or misrepresent. If you start by telling the audience that the topic is interesting because of X, but present no data about X, they are going to be confused and ultimately unimpressed.

Remind them who you are

It is really easy to forget the speaker's name, especially in talk sessions. And that's a shame!

- Put your name on your first slide (obviously)
- Put your name on your last slide the one the audience looks at while you answer questions. If you have an email address that is clearly your name use that
- If you are doing a lightening talk (5 min or less) have a subtle coloured banner at the bottom of all slides (same one every slide) that says your name and affiliation

Acknowledgements

- Get them in there somehow but don't end on an Acknowledgements slide – it's anticlimactic and distracts your audience from your awesome conclusions. If you do want to do them at the end go back to your conclusions slide afterwards

Practise!

- Not just to yourself but to an audience
- We have all done it but try hard to not give a junk unprepared practice talk. Those kind people are there to help don't take their time for granted

Hargreaves lab tips for oral presentations (May 2021)

- If it's an important talk or you're still new to making talks, you should schedule at least 2 practice talks, both of which should be polished, so that you can incorporate at least 1 round of feedback and then get feedback on the new version (don't use the same audience though, people only have so much time)