

TALK PREPARATION TIPS

Tell a story

Every talk, regardless of length and audience, should tell a story (rarely a series of short stories). This sounds easier than it is.

How to tell a story:

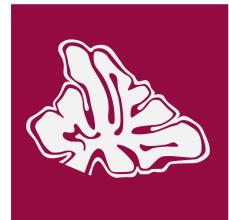
- Start with your **big biological question** (the BBQ). You want to hook people's interest and excitement within the first two slides.
- Give one take-home-message per slide. These should be your slide titles. Read the slide titles in order to see whether the story makes sense.
- Introduction:
 - o Include only information essential to understand your specific hypothesis. Less is more. People have limited working memory space. Do not assign information to working memory that is not essential.
 - o Let your question logically flow out of the background & knowledge gap that you're presenting. People (especially scientists) love to feel smart and they feel smart when they can predict your question (and findings).
 - o When in doubt, cut it out.
- Results:
 - o Give the "so-what" of your findings, not just the "what." Why should we care about your findings? What is the relevance?
 - o Present your finding using the best visualization tools. In general:
 - Videos > pictures > schematics > graphs > words
- Build in pauses. You can use these to reiterate findings, ask the next question, take a sip of water, and let the information of your talk sink in.
- Have a conclusion slide where you once more reiterate what you have told and why your findings are important. Everyone should leave the room/meeting knowing your one sentence take-home message.

Identify your audience

Adapt your presentation to your audience. Avoid jargon - when in doubt, cut it out.

People like to feel smart. It's better to explain something your audience may already know than to lose part of your audience by explaining too little.

Prepare a presentation that can be followed by undergraduate students majoring in biology if you do not know who will be your audience.



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Stay within your time limit

Find out the time limit. Make sure you know whether the time limit includes time for questions or not. If allotted time includes time for questions, save ~20% of the time limit for questions from the audience. **Do not go over time.** Going too long means you'll rush through the end of your presentation, and you will need that time to reiterate your take-home-message.

Rule of thumb is one minute per slide. Scripts help for short presentations and when you're nervous. **Practice** and time yourself.

Keep a simple layout

Keep the following rules for each slide. [Here is a good checklist.](#)

Fonts:

1. Use same font size for titles (~28 pt) & text (~16 pt)
2. Use a non-serif font, like Arial, Segoe UI, or Calibri
3. Use **bold**, **color**, CAPITALS, or **SIZE** to emphasize important content (use it sparingly)
Do not use *italics*, underline, or **flashing objects**
Use lighter colors and smaller font size to include less important content, like citations, n numbers, p-values, etc.

Titles:

1. Place title at same spot in each slide
2. Use full sentences in active voice to summarize the slide's take-home-message

For example: Optogenetic stimulation of Purkinje cells temporally inhibits nuclei neurons.
Not: Optopatcher recordings of nuclei neurons.

Figures:

1. All figures should be colorblind friendly. Immunofluorescent images should be black/white when in single color or magenta/green for dual color. Triple color images should be avoided when possible. [Line art and summary data should be in colorblind friendly color palettes.](#)
2. Rotate y-axis labels to be read horizontally.
3. Only include most important information – less is more.
4. Make your own schematics when possible.

General slide lay-out:

1. Give your data space – one, max two, graphs per slide is a good rule of thumb
2. Everything on the slide should have a function – no logo's, index, slide number, etc
3. When in doubt, cut it out.

[Useful resource on how to prepare an effective presentation.](#)