

Simple guidelines for giving a good talk

1) **Narrative:** Make sure you tell a story that has a beginning, middle and end. There has to be a logical flow from one point to the next, but also dramatic tension and, if possible, some surprises. Think about your story long before you start putting the actual slides together. Work on it continuously until it's ready to be told.

2) **The audience:** Take into account their level of knowledge (or ignorance). Listen to your talk from the point of view of someone outside the field. Minimize use of jargon and acronyms. Define every new term carefully. Never assume that your audience already knows about your molecule or your area of research. Never assume that your big question is obvious.

3) **Slides:**

- Every slide should convey one idea, described by the slide title.
- Every image and plot, unless your own alone, should be properly credited.
- Every image, graph, axis and feature should be clearly labeled.
- Proper units and scale bars should accompany every image and plot.
- Fonts and colors should be clearly visible.
- A numerical value is worthless unless accompanied by an error estimate.
- A picture is worth a thousand words; avoid lengthy text.

4) **Rehearsal:** Rehearse your talk multiple times, alone and in front of people. Use the rehearsal to test all presentation parameters: clarity of narrative, timing, visibility of slides, etc. Make sure that your slides serve you in telling the story; otherwise modify them.

5) **Questions:** Try to predict all possible questions. A good speaker anticipates most audience questions ahead and has ready answers. Prepare extra slides for addressing anticipated questions.

6) **Remember:** "Every talk is a job talk" (Lubert Stryer). The way you present your work, at any forum, determines how your colleagues assess you as a scientist. Also remember that a talk is a battle: You should be constantly battling to engage and win over your audience.

Sources and suggested reading:

- Rob Phillips, Caltech Biological Physics Bootcamp, presentation guidelines (personal communication)
- Bang Wong, "Points of View", article series in *Nature Methods* (2010-2011)
- Uri Alon, "How To Give a Good Talk", *Molecular Cell* (2009)