

## **Giving a Great Scientific Talk: random thoughts and lessons learned**

### **One size does not fit all -- know why you are giving the talk and pay attention to details.**

- Consider the audience and prepare a talk for them. Know why you are giving the talk -- introducing a complicated topic to novices is not the same as talking at a highly specialized and focused meeting. In general, assume that only a handful of people will know you or your work and prepare accordingly.
- Know how much time is available and prepare a talk that realistically fits.
- Make sure you clarify issues regarding AV resources ahead of time; there is nothing worse than finding out last minute that there is no computer available or you can not plug in your own laptop.

### **If your introduction is poor, you are sunk; the audience will be sleeping and making shopping lists; even the best of data won't get them back.**

- Don't waste your critical first minute reading your title slide or telling a really dumb joke.
- Avoid word slides for your introduction; trite or not, a picture is really worth a thousand words.
- Avoid jargon, abbreviations and details - the best way to lose the audience is to talk over their heads.
- Tailor the introduction to your audience. In a general audience give a broad introduction. For a short platform talk at a specialty meeting you would insult the audience if you used that same broad introduction.
- Remember -- Nobody cares about your work as much as you do and only you care about the details so LEAVE THEM OUT and HIT THE HIGH POINTS. A good introduction will make your audience care and will help them see connections between your work and their work.

### **Good slides won't hide bad data - but bad slides will hide good data.**

- White and light-colored backgrounds with dark type are often better because you have to turn off the lights to see dark slides. If you choose to use dark slides, don't use a gradient of color. Yellow lettering works, - reds and pinks usually do not.
- Don't use multiple fonts - and make sure the font you choose is easy to read. Never use less than 16 point.
- Proof your slides carefully; nothing says "I don't respect you" more than messy slides full of errors.
- If you have embedded movies, let your host know and make sure they work before the seminar. Be gracious and move on if the technology fails you (and don't curse!)
- Keep the slides uncluttered -- if you are not going to talk about it, take it out.
- Make it easy for the audience to see the forest and not the trees. Repeat key insights and observations; pause to emphasize them, change your pitch.
- Titles help -- you and the audience.

### **How you carry yourself will impact greatly on the success of your talk**

- Talk, don't read - but don't be too conversational either - most talks are somewhat formal.
- Stand up and if you are short or the podium is tall, move away from it. It is really bad if the audience only sees your eyes and the top of your head.
- If you move around a little, the audience will have an easier time focusing on you. But moving too much can be distracting too.
- Speak loudly and clearly, monotone is a great way to put the audience to sleep.
- When people get nervous the "pitch" of their voice tends to increase -- practice talking "from the gut".
- Use the microphone and make sure it is positioned to be effective.

- You want to convey in your body language and in your speaking tone that you are a "nice guy". Arrogance rarely works but "push-over" does not work either. Stand confidently not hunched over.
- Don't talk to the slide - talk to the audience. It is really important to make eye contact but that is difficult to do if your body is turned toward the slide.
- Use the pointer wisely -- under use it and nobody can follow you, over use it and you will distract the audience from the science.
- Invite questions, don't belittle the person who asked the question and don't get defensive.

### **Humor can help but humor can hurt too, so be careful and be yourself.**

- Too many jokes send the message that the talk is not really that important to you.
- The worst thing to do is to offend someone in the audience and we all have a different yardstick for what is appropriate.
- Contrived humor is the worst, so if it doesn't feel right or if it is not you, skip it.

### **In many scientific disciplines Powerpoint has become standard and it can be a great tool when used properly.**

- Consider carefully before using elaborate fades, backgrounds and glitzy sound effects - while these are good for some audiences (and I think that is debatable), they are usually just distracting and they can become a terrible time sink when you are preparing your talk. Most importantly, in some settings they send the wrong message - they say you are whimsical and cute - not serious. Cute will not get you the job!
- A palette of 1000s of colors can be fun, but again a time sink and often a distraction. Use color, but use it wisely -- what looks good on one LCD projector looks terrible on the one you end up using, so stick to basic safe colors. Remember that more than one person in the audience is likely to be red-green color-blind.
- Animation can be powerful, but not every slide needs animation - in fact, most do not.

### **If you go over your time limit some people will never forgive you.**

- Practice your talk out loud and time it; if you find yourself rushing, take out slides, don't decide to just talk faster.
- Make sure to wear a watch and to look at it.
- As you get more experience you will develop an internal sense of the timing of your talks but the only way to be absolutely certain that this does not happen is to practice.
- Build in some mile markers along the way and use these markers to help you adjust as you go along.

### **Answering questions is an art-form.**

- Once you have practiced your talk and are happy with it, ask some good and honest friends to ask you hard questions. Try to anticipate what people will ask and think how you might respond.
- Repeat the question and make sure you understand it; if you don't say so politely.
- Defensive is bad, dismissive is worse, but that doesn't mean you need to be obsequious.
- Try not to ramble and if it is a very complicated answer it is OK to suggest that you talk with that one person at the end. Watch the audience - especially at the end of a long question period people get restless, so avoid very long complicated answers.

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