Tips for preparing an effective scientific talk

Slide preparation
1. Try to have one (and only one) central idea for the talk. Decide which "takeaway message" you are aiming for.
2. Provide enough introduction. A reasonable aim is to have 80% of the people understand 80% of the talk.
3. Define the research question
4. Use meaningful titles for slides – a sentence that clarifies the message of the slide. Have only a single point in each slide. If you prepare your slides so that they only contain a single point you can calculate about 1-2 minutes per slide.
5. Figures are key. Strive to make them readable, put only the info that is essential. Explain axis of figures shown, result expected and meaning of result achieved. Better use less figures where each one is fully understood than many figures that are only understood by a few of the listeners.
6. Use limited text on slide – need not have all text that will be said.
7. Learn from experts part 1: many good tips on slides preparation: www.cellbio.duke.edu/faculty/Hogan/Powerpoints/Powerpointpresentation.ppt

Talk practice
8. Think of what you want to say on each slide - put yourself in the shoes of a beginner or non-expert. Remember the “curse of knowledge” – you have to explain to people that do not know the things you learnt working on your project (http://www.37signals.com/svn/posts/213-the-curse-of-knowledge). Note the difference between what you know now and what your audience does.
9. Start preparing early - send draft slides a week in advance (will still be updated later of course)
10. Memorize first two sentences of talk. It is a good way to ensure a clean start.
11. Practice makes perfect - perform a practice talk with people that have not been involved in the project (i.e. not only PI). Get detailed feedback (automatically number your slides for easy commenting). Repeat as much as you can/want.

Talk delivery
12. Learn from experts part 2: watch movie on “how to give a good talk” at http://www.youtube.com/watch?v=5OFAhBw0OXs&feature=related also: http://www.weizmann.ac.il/mcb/UriAlon/nurturing/How_to_give_a_good_talk.html
13. Make sure to be on time or finish early. People never complain on a lecture being too short...
14. Answering questions: listen carefully to the question, repeat it to make sure you understood and give yourself time to reflect on it. Encourage questions by being positive, formalize your answer with a YES attitude rather than a NO attitude. This is your chance to learn something new and find the weaknesses in your thinking or your presentation. If you do not know the answer — that is fine too — this is not an exam, this is a discussion, and the most important questions are still unanswered.

Feel free to distribute. Send comments and suggestions to ron.milo@weizmann.ac.il