

How to give an awesome scientific presentation

Adapted from "How to give a scientific presentation" by Karl W Broman, UW Madison

















Why give a scientific presentation?

- You were told to
- For practice (eventually, in almost any career, you'll have to do it)
- To get a job
- To inform people
- To become known in your field



What make a bad presentation?

Answers from group:

- Monotony
- Too many words
- Talking too fast
- Unprepared
- Not knowing audience
- Illogical flow
- Too much jargon
- Bad graphics/slides
- Awkward delivery



STROBE What make a good presentation?

Answers from group:

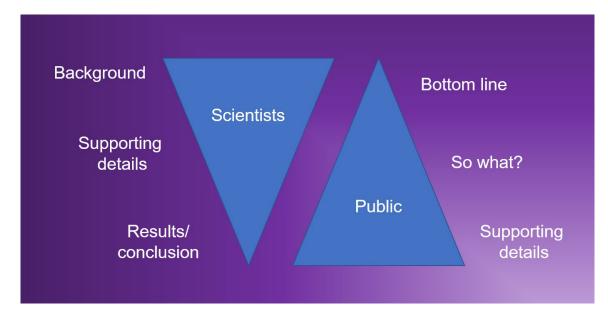
- Passionate about presentation
- Good intro/background
- Engaging
- Tailors to what audience wants
- Confident + assertive
- Concise
- Easy to understand



Basic principles of a good scientific presentation

- Know your audience!
- Take it seriously
- Keep things simple
- Tell a story
- Start with the big picture
- Keep to the time limit





Know your audience

What level of detail do you think you need for:

Your lab

Your department

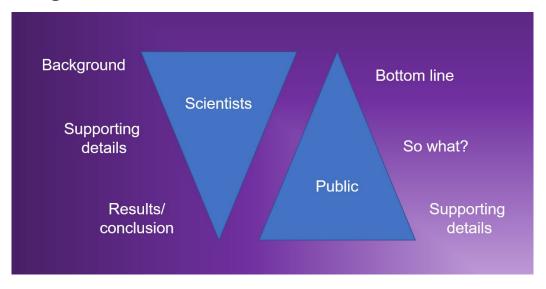
Conference presentation

SURS symposium

Preparing your story

What is your take home message

- What is your motivation for doing the research?
- What background needs to be covered so they understand this?
- What figures support your take home message?
- What is the logical unfolding of this message?





Preparing your slides

- Be consistent
- Think carefully about colors (projector vs computer, remote, color blindness)
- Design figures specifically for the talk
- Can you replace text with illustrations?
- Think about the font you choose
- One message per slide

Beginner Motorcycles



- My personal favorite: the Suzuki Savage
- Light weight (~380lbs)
- Adequate power (650cc engine)
- Low seat height fits most riders

Chilean Exports

- Fresh fruit leads Chile's export mix Chile emerges as major supplier of fresh fruit to world market due to ample natural resources, consumer demand for fresh fruit during winter season in U.S. and Europe, and incentives in agricultural policies of Chilean government, encouraging trend toward diversification of exports and development of nontraditional crops - U.S. Dept. of Agriculture, Economic Research Service Report
- Chile is among the developing economies taking advantage of these trends, pursuing a free market economy. This has allowed for diversification through the expansion of fruit production for export, especially to the U.S. and Western Europe. Chile has successfully diversified its agricultural sector to the extent that it is now a major fruit exporting nation. Many countries view Chile's diversification of agriculture as a model to be followed.
- Meanwhile, the U.S. remains the largest single market for Chile's fruit exports.
 However, increasing demand from the EC and Central and East European countries combined may eventually surpass exports to the U.S., spurring further growth in Chile's exports.
- If you've read this far, your eyes probably hurt and you've been reading this tedious long-winded text instead of listening to me. I'm insulted- can't you see I'm doing a presentation up here? Look at me! Congratulations, however, on having such good eyesight.







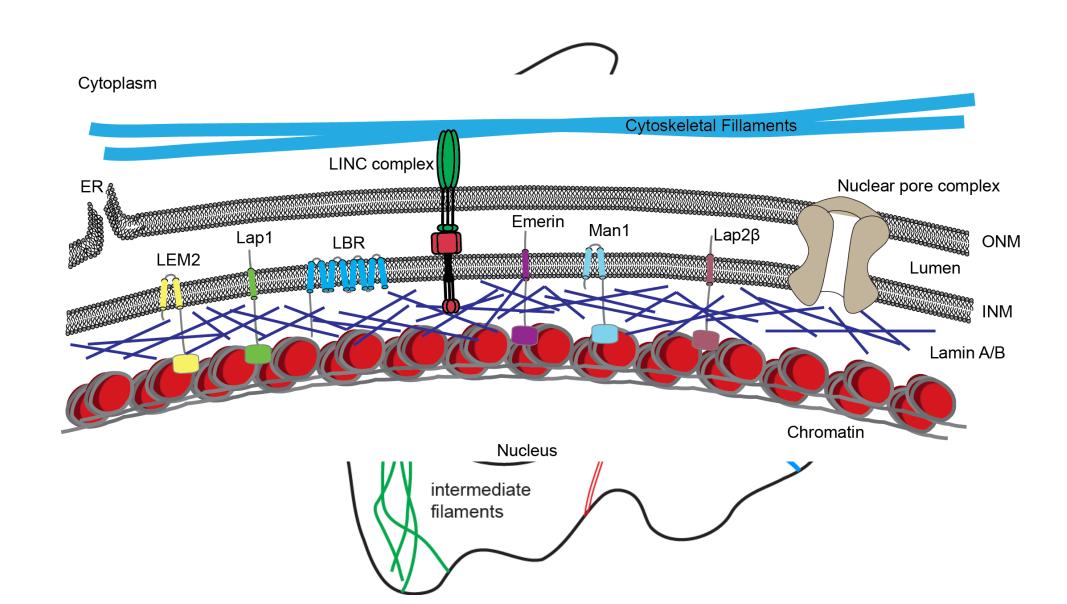


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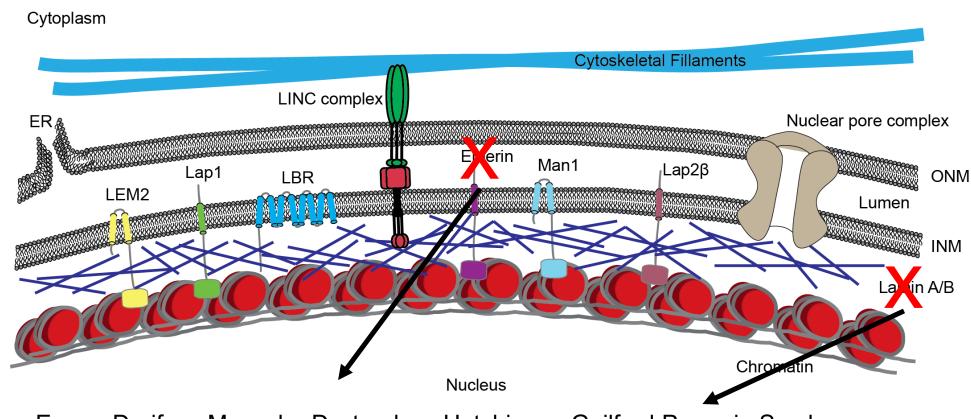


The nuclear mechanical network is complex





Mutations or disruptions in the nuclear mechanical network lead to various diseases



Emery-Dreifuss Muscular Dystrophy weakened nuclei

Hutchinson-Guilford Progeria Syndrome Heart disease (cardiomyopathy, atherosclerosis) Stiff nuclei Muscular dystrophies



Things to avoid when giving a presentation

- Slides with giant blocks of text
- Reading the slides verbatim
- Not labelling your figures/unreadable or meaningless labels
- Serif Fonts (they are much harder to read on slides)
- Including figure/data that you do not discuss
- Gratuitous animations



Delivering your presentation

- Exude enthusiasm and confidence
- Move around (in person)
- Don't present to your slides (in person)
- Explain fully or not at all
- Don't apologize
- Relax, slow down, occasional silence is ok
- You want your audience to care and understand



How to handle nervousness

- Expect to be nervous (always)
- Be prepared (practice beforehand)
- Know your audience
- Have something to drink on hand
- It's usually not noticeable
- It's ok to screw up now and then
- It's easier when you care about what you're talking about



Practice tips

- Volunteer to give talks
- Think it through carefully (imagine what the audience is thinking)
- Focus on the transitions and tricky bits
- Time yourself
- Know what you need
- Have your opening memorized
- Videotape yourself

Question and answer session

- Listen
- Repeat the Question
- Be gracious
- Admit ignorance
- "I'll have to give that some thought…"
- "Thank you for the suggestion..."
- "I've thought of that, but haven't found a solution yet..."

Tips for your SURS presentation

- 1 slide, no animations (videos ok)
- 3 min presentation, 2 min Q&A

- Define your take home message
- Suggestion: Half the slide on motivation/background, half the slide on results or future plans (example next slide)
- Work with your mentor/PI
- Ask myself and Ellen for help/suggestions
- Practice



Title/Take home message here

Background/motivation

- Ok to have some bullet point text
- Try to include a figure/image/cartoon if possible

Figure here

Make sure you have enough text to describe your figure