

# 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:

Too many words on a slide

Reading from the slides

Too many pauses

Whipping through the slides too fast

Monotone

Not making it relatable

No eye contact/ignoring the audience

Not knowing your audience



## **STROBE** What make a good presentation?

#### Answers from group:

- Appropriate length/density
- Telling a story
- Simple graphics
- Well organized
- Targeting audience correctly
- Animated and engaging
- Conveys key important points while being concise
- Food!



### 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

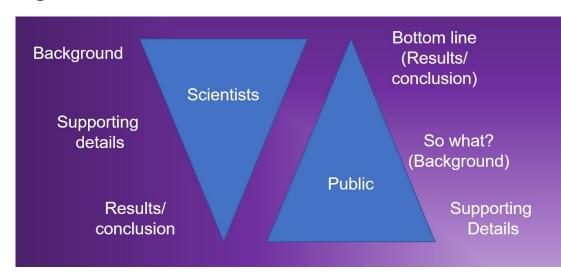
Conference presentation

SURS presentation

### 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 is the logical unfolding of this message?
- What figures support your take home 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.







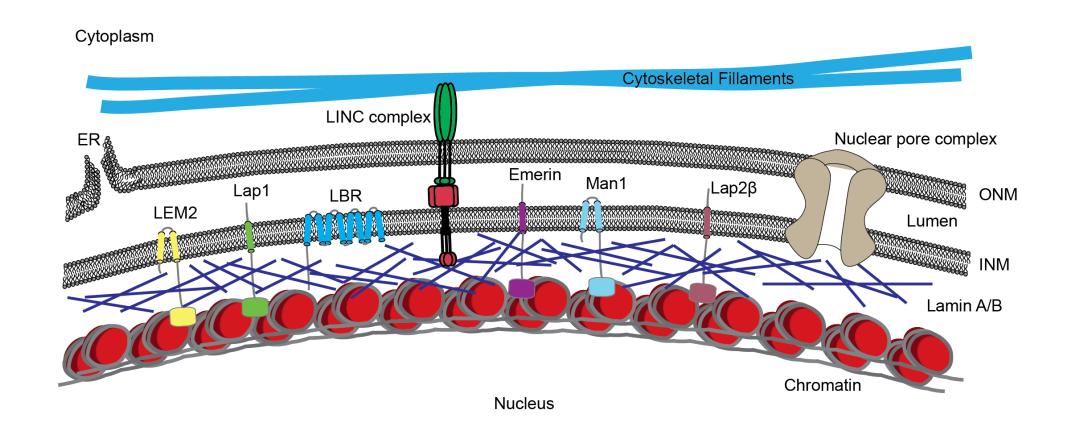


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### The nuclear mechanical network is complex





### 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

- ~7 min presentation, 3 min Q&A (5-7 slides)
- We are not expecting results
- Focus on:
  - The question you are addressing this summer
    - Why is it interesting?
  - Tools/techniques you'll use to address it
  - Any predictions/hypotheses you might have for your results
  - Future plans
- Remember to start with defining your audience and to define one take home message for the whole presentation
- Work with your mentor/PI
- Ask myself and Ellen for help/suggestions
- Practice