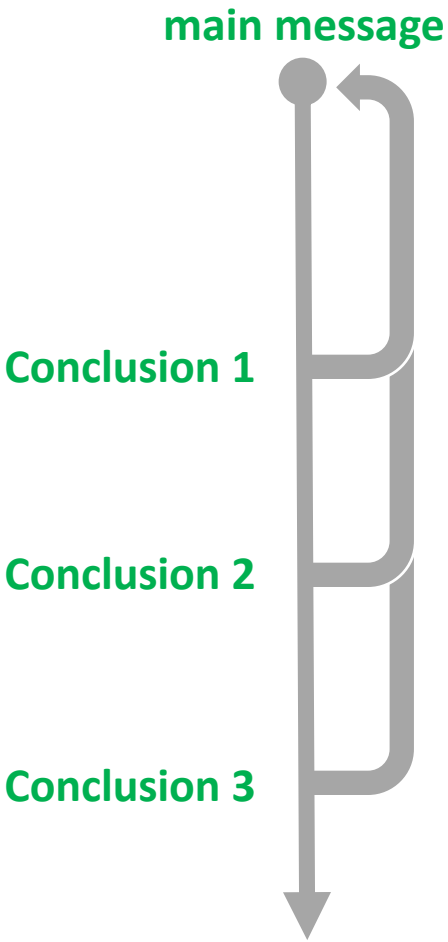
Tips for slide presentation and design

Additional Resources

Create a single storyline.

Identify a **take-home message**; everything else leads to it.



Straight chronology is a common trap, but it's actually confusing.

The authors ligated DNA into a plasmid,

then they transformed it into cells,

then they looked at fluorescence data,

and then they had a calcium sensor.

But ***why*** did they do these things?
Lead with the why.

A story conveys logic & motivation

The authors wanted to engineer a calcium sensor's binding sensitivity.

To change the binding site, they did site-directed mutagenesis,

then they expressed the mutant protein in cells,

and then they assessed its binding properties with a fluorescent assay.

Good slides are a lot like good figures

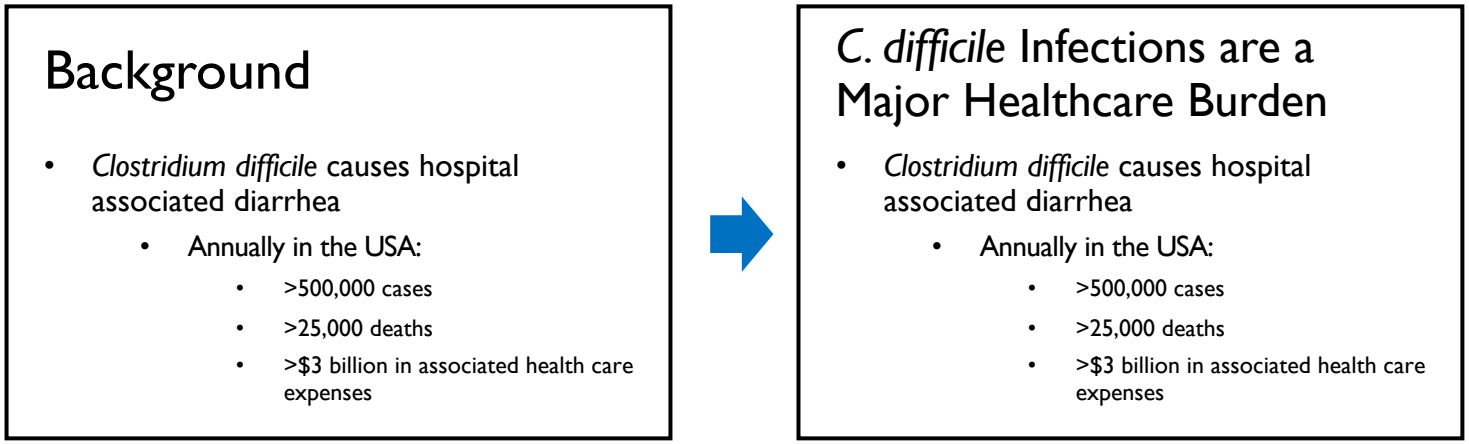
1. Ask "What would help my audience understand this faster?"
2. If you're not going to talk about something, **leave it out**.

- Make slide **title** a take-home message (conveys "so what" rather than just "what")
- Show **minimal essential data**
- Maximize **signal-to-noise ratio**

  Control time and space by separating, adding, and subtracting the original figures
- **Effective redundancy**: align visual, written, + spoken!

Effective titles communicate a take-home message

- concise (2 lines max) and describe main point
- 1 idea per slide



- **TIP**: Start with a deck of blank slides and ADD ONLY TITLES to check logical flow, then populate the slides with support for the message

Effective titles communicate a take-home message

	DON'T use	INSTEAD use
	General descriptions of "what"	***Sentences that answer "so what?"***
Method	EMK-1 Knockdown	**EMK1 was knocked down in MDCK (kidney) cells using siRNA**
Results	Ca-switch	**MDCK cells form a lumen after extracellular calcium changes**
	Mitochondrial ROS induction in cell lines	**Mitochondrial ROS induction is decreased in adk knockout cells**
	Comparison of primer specificity	**Primer 1 is better than Primer 2 at differentiating closely-related HIV strains**

Ask yourself two questions over and over:

What would help my audience understand this faster?

What is on the slide:

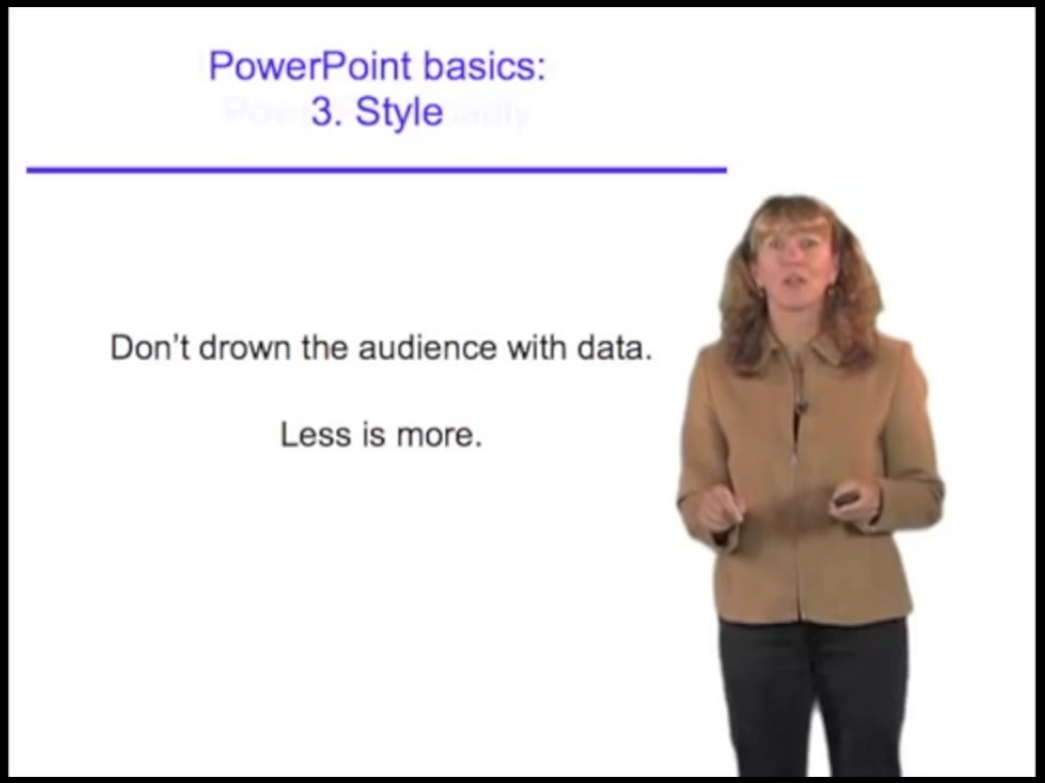
- Title is a message
- Minimize NOISE

Am I going to talk about everything on this slide?

What you are saying:

- Align spoken & visual
- No extras

Demo: presenting multi-panel figures



Susan McConnell (Stanford),
Designing effective scientific presentations
Link: https://youtu.be/Hp7Id3Yb9XQ
review excerpt from timestamp 20:56 until 25:18

Avoid light or bright colors and tiny fonts

Am I legible?

Am I legible?

Am I legible?

Am I legible?

Am I legible?

Am I legible?

Templates are just visual noise. Avoid them.

My name - Today - Where we are