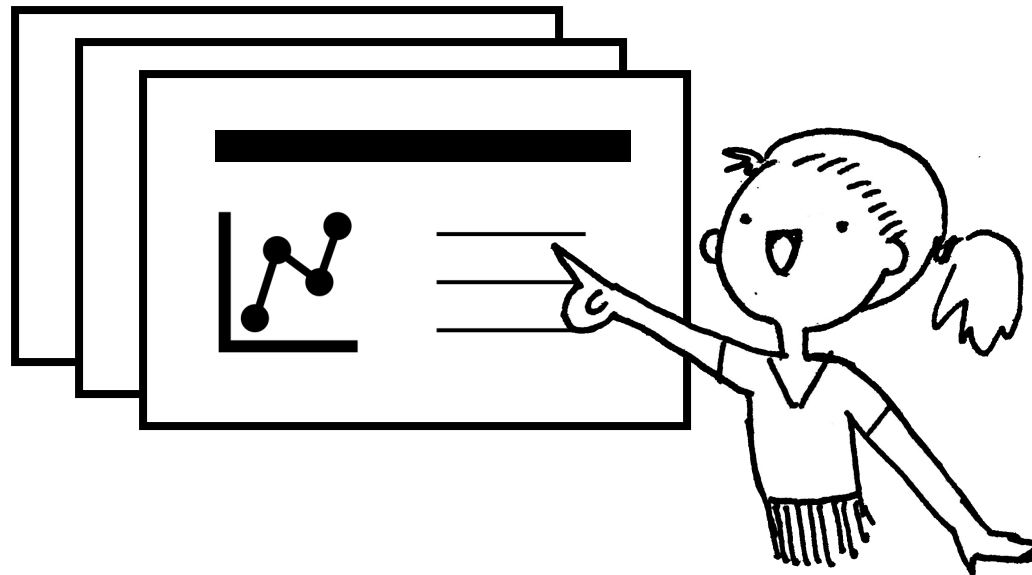


Oral Presentations

20.109 Communication Workshop 4



Helping you communicate effectively.
mitcommlab.mit.edu/be/

Today's agenda:



Overview: keys to effective slide presentations

[Extended resources on wiki](#)

Work individually to edit your draft

[Revise both slide design and accompanying script](#)

Practice with a partner

[Edit slide design based on feedback](#)

Practice presenting in small groups

[Get feedback on script and delivery](#)

Work individually on remaining slides/script

[Leave with completed slide and a framework for finishing your presentation](#)

Reflect and discuss

If you've been to an oral presentation of a journal article before, what is it like?

For everyone, what do you think a journal article presentation could be good for?

Why do we present journal articles?



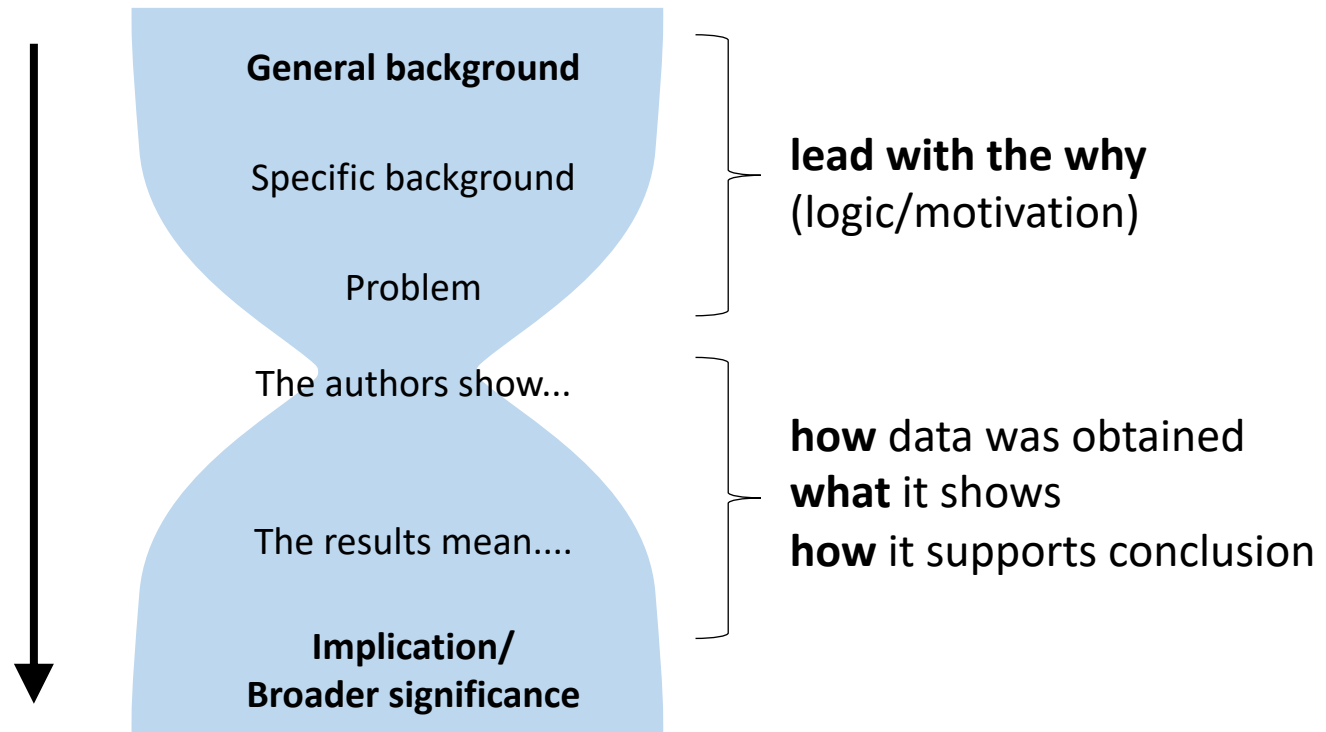
- Learn how work has been done
- Practice evaluating what might be done differently or next
- Improve YOUR communication and scientific reasoning skills

109 goal: show that you **understand** the paper

Clearly present to us:

- the **take-home** message
- why the experiments were done and how (**methods!**)
- How the **conclusions** were drawn from the results

A compelling story begins and ends with a connection to larger context



Organize your journal article presentation to **tell us a story**

Topic that everybody cares about

Why we need to know more

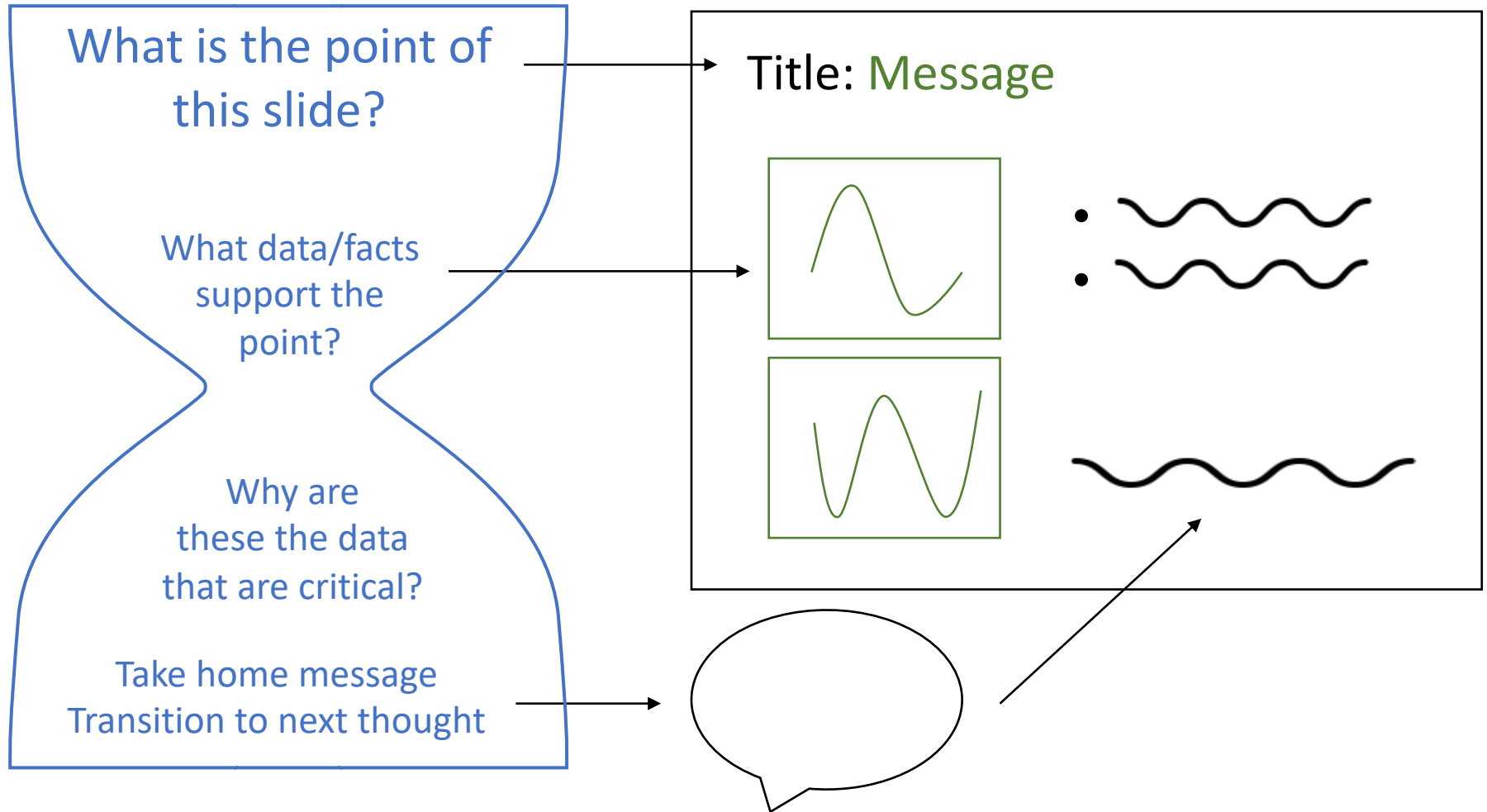
To address this, the authors show...

The results mean....

...how this work contributes to the topic everyone cares about

- Identify the **main question/message**
- Include only the **essential** results, key experiments and relevant data
- **Connect** results back to the message
- Explain **logic & motivation** with titles & transitions

Think about what you'll say with each slide!



Try not to read off a script.

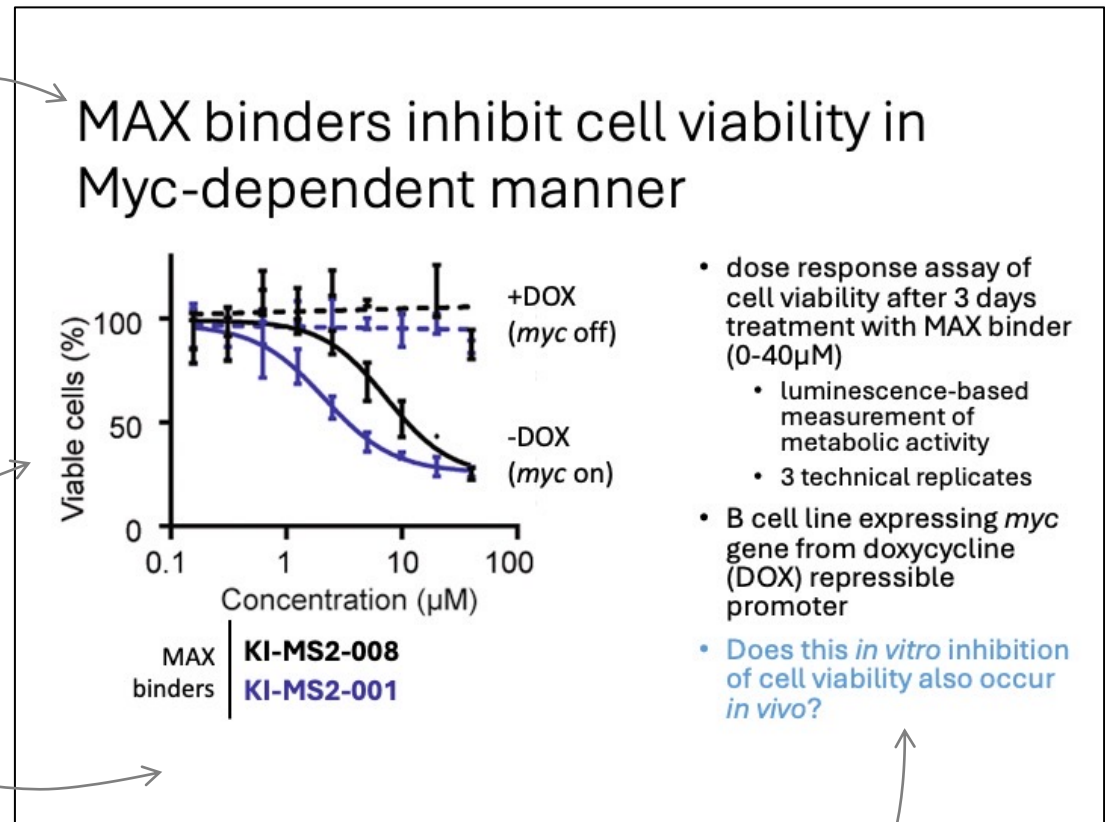
Practice with a script then convert to bullet points

Use all parts of your slide to support your message.

The **title** conveys the “so what” message

One message per slide: only include data that supports that message

No unnecessary content: only figures you discuss

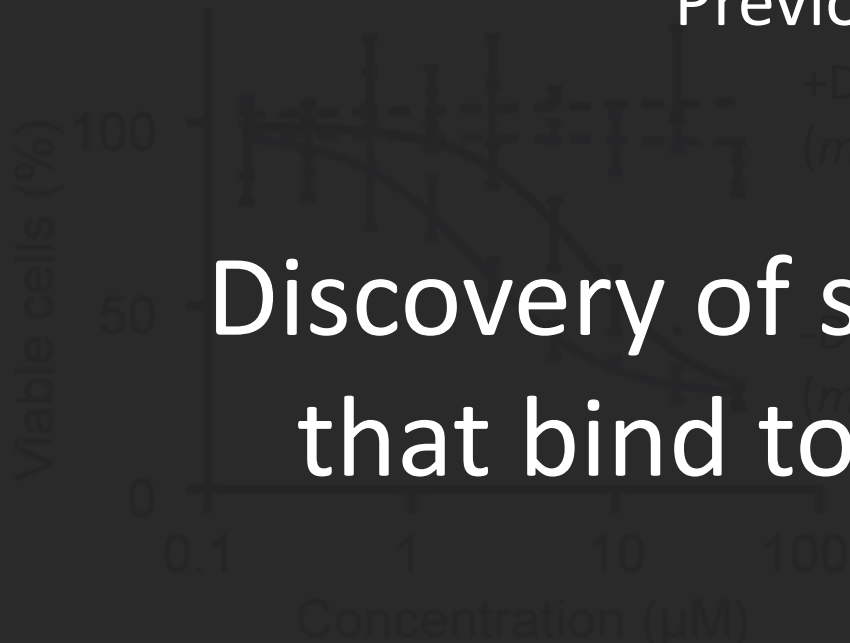


Text supports the message, not a full script (make sure font size is large enough!)

EXAMPLE

MAX binders inhibit cell viability in Myc-dependent manner

Previous slide:



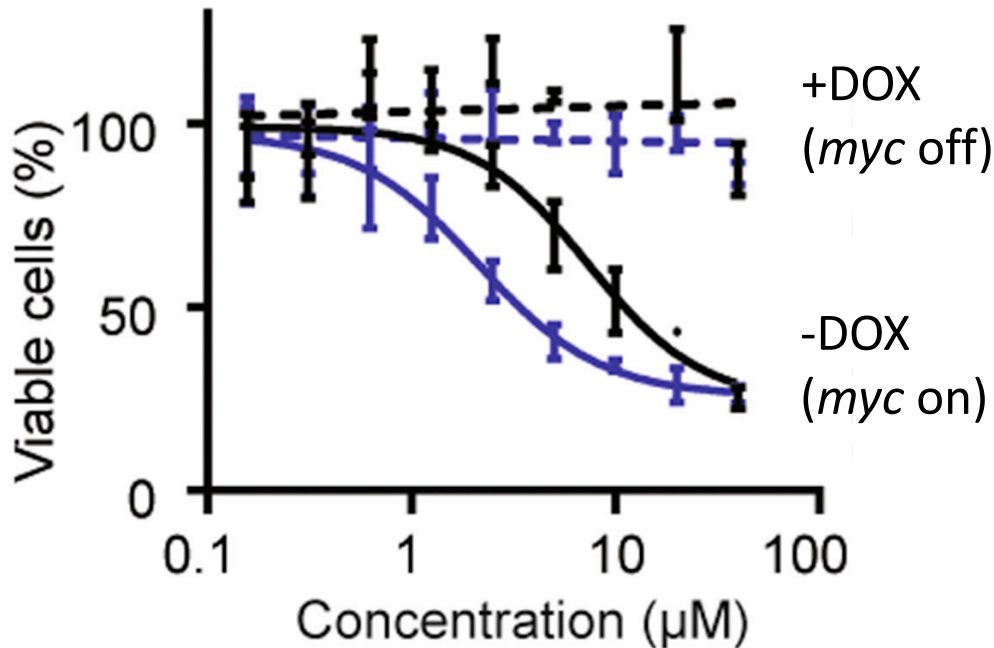
- B cell line expressing *myc* gene from doxycycline (DOX) repressible promoter
- Cell viability assay of 3 days treatment with MAX binder
- Fluorescence-based measurement of metabolic activity
- 3 technical replicates

Discovery of small molecules that bind to MAX protein

MAX binders	KI-MS2-003
	KI-MS2-001

EXAMPLE

MAX binders inhibit cell viability in Myc-dependent manner



MAX binders | **KI-MS2-008**
KI-MS2-001

- dose response assay of cell viability after 3 days treatment with MAX binder (0-40µM)
 - luminescence-based measurement of metabolic activity
 - 3 technical replicates
- B cell line expressing *myc* gene from doxycycline (DOX) repressible promoter
- Does this *in vitro* inhibition of cell viability also occur *in vivo*?

20 minutes

Working individually, revise your draft slide and script

What is the main point of the slide, and how does it fit with your overall story?

Remember:

- titles as **messages** (1 message per slide)
- 1 slide \approx **1min**
- balance detail between slides and script (**effective** redundancy)
- plan how you **transition** to/from this slide

15 minutes

With a partner, practice your slide and get feedback on the design

Giving feedback:

- can you briefly restate what the **main point** was?
- what **questions** do you have based on what you heard?
- what do you think your partner did **well**? could be **improved**?

Remember:

- titles as **messages** (1 message per slide)
- 1 slide \approx **1min**
- balance detail between slides and script (**effective** redundancy)
- plan how you **transition** to/from this slide

Take the next 10min to collect your thoughts and further revise your slides based on feedback

ACTIVITY

Practice delivery of your slide in a small group setting

What is the main point of the slide, and how does it fit with your overall story?

Giving feedback:

- can you briefly restate what the **main point** was?
- what **questions** do you have based on what you heard?
- what do you think you went **well**? could be **improved**?

Audience Q/A is an opportunity to have a deeper conversation

Time

Let the questioner finish.
Give yourself time to think.

Thought

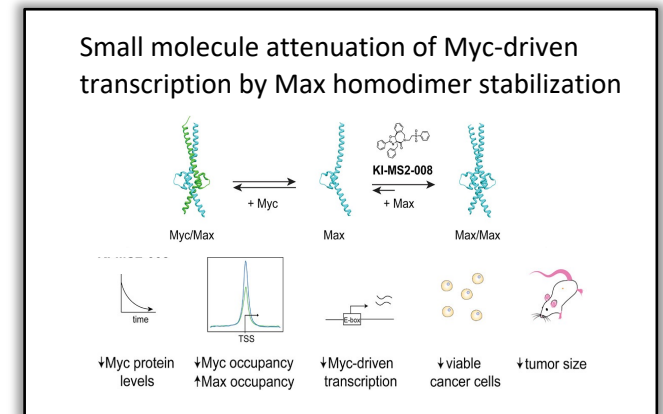
Make sure you understand the question.

Do your best, use your reasoning, but don't guess or just say you'll look into it.

What goes on the screen?



Struntz et al, 2019



Pro tip: have a summary slide up when you ask for questions!

It's easy to avoid common pitfalls

DON'T

Start so late you don't have time to digest the paper

Be exhaustive (it's exhausting)
List experiments chronologically

Lose points for time (9.5-10.5 min)

Forget to cite which paper it is

Say "we did this"

Use illegible labels

DO

Give yourself time to read the paper carefully 2-3 times

Be selective about what you present
Tell a story

Practice until you hit the time limit

Include citation in your title slide

"The authors did this"

Use ≥ 20 pt font

Make your own helpful figure labels

Use legible colors

Next steps

- slides and additional resources posted on the wiki (“Communication” tab)
- build remainder of your journal article presentation using similar strategies
 - can make an appointment with a Comm Fellow to practice delivery, content clarity, or anything else!
- next workshop: apply what you’ve learned so far! organize module 2 data into a narrative for your research article assignment

Acknowledgements

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