

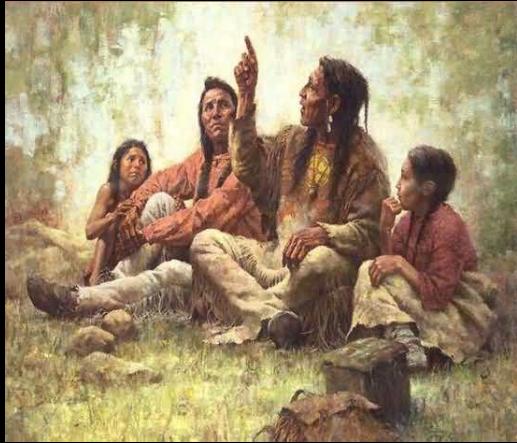
Speaking Science

Peter Emmrich,
John Innes Centre, UK

Find the tools that work for you



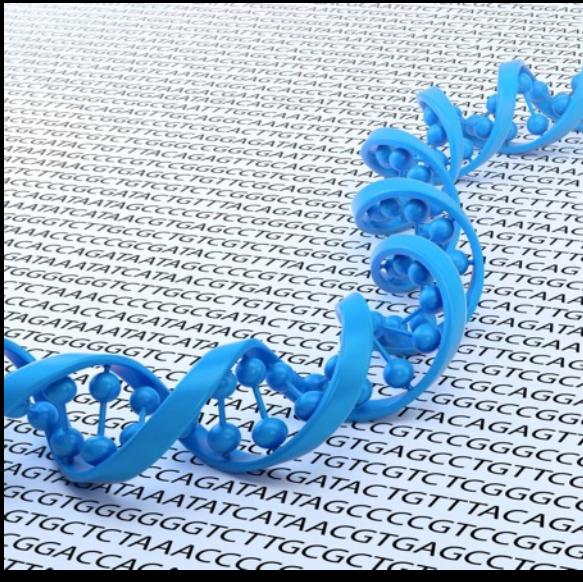
Tell a story



Your Work



The Problem



The Impact



Three questions before you start

Question 1:
What is the aim of your talk?



A talk is not a paper

Question 2: Why are you the one to give it?

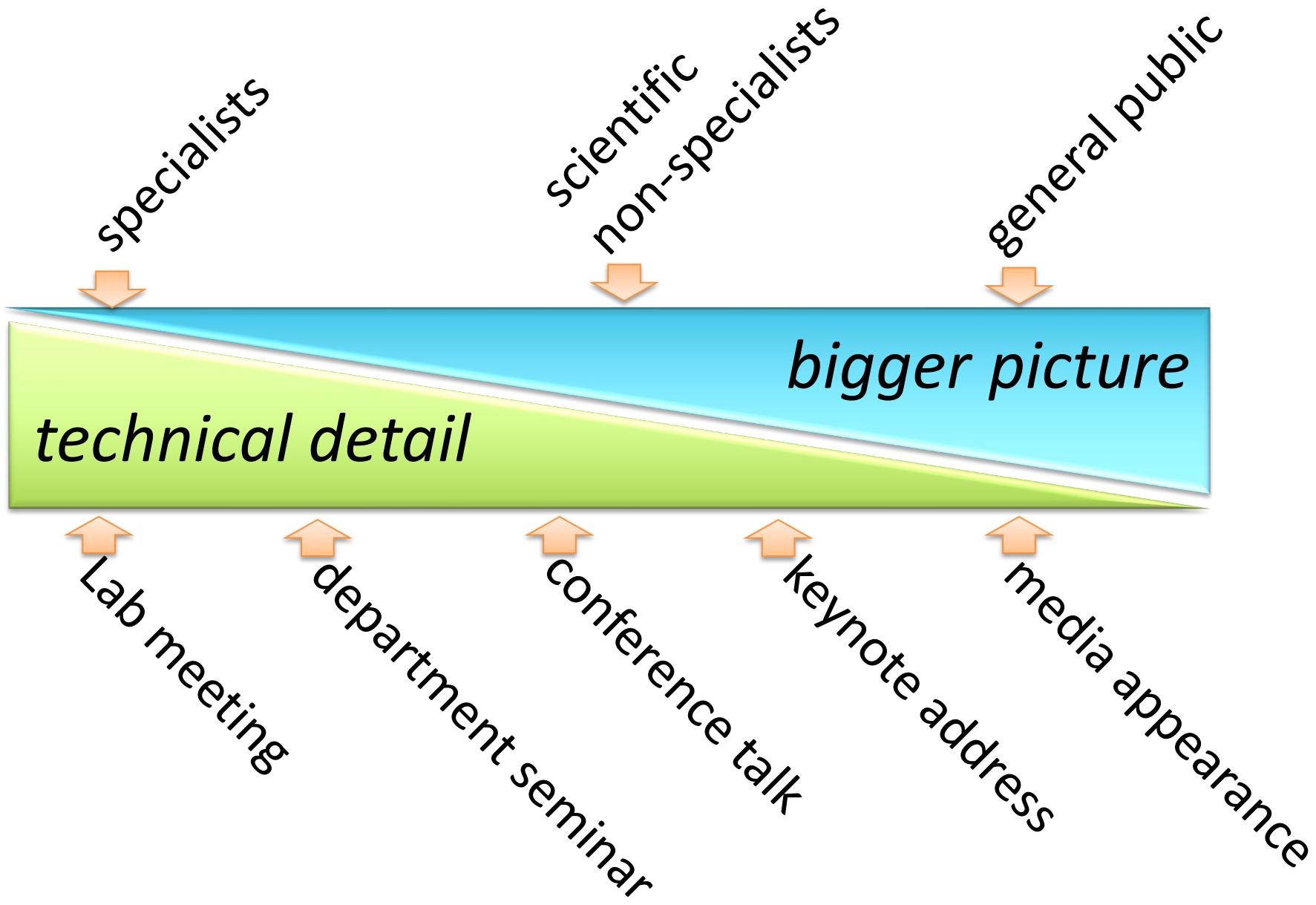


You have authority
in your field

You have authority
over the story you tell



Question 3: Who is your audience?



Three answers

The aim of your talk

Your position of authority

The background of your audience

the introduction
Framing the problem

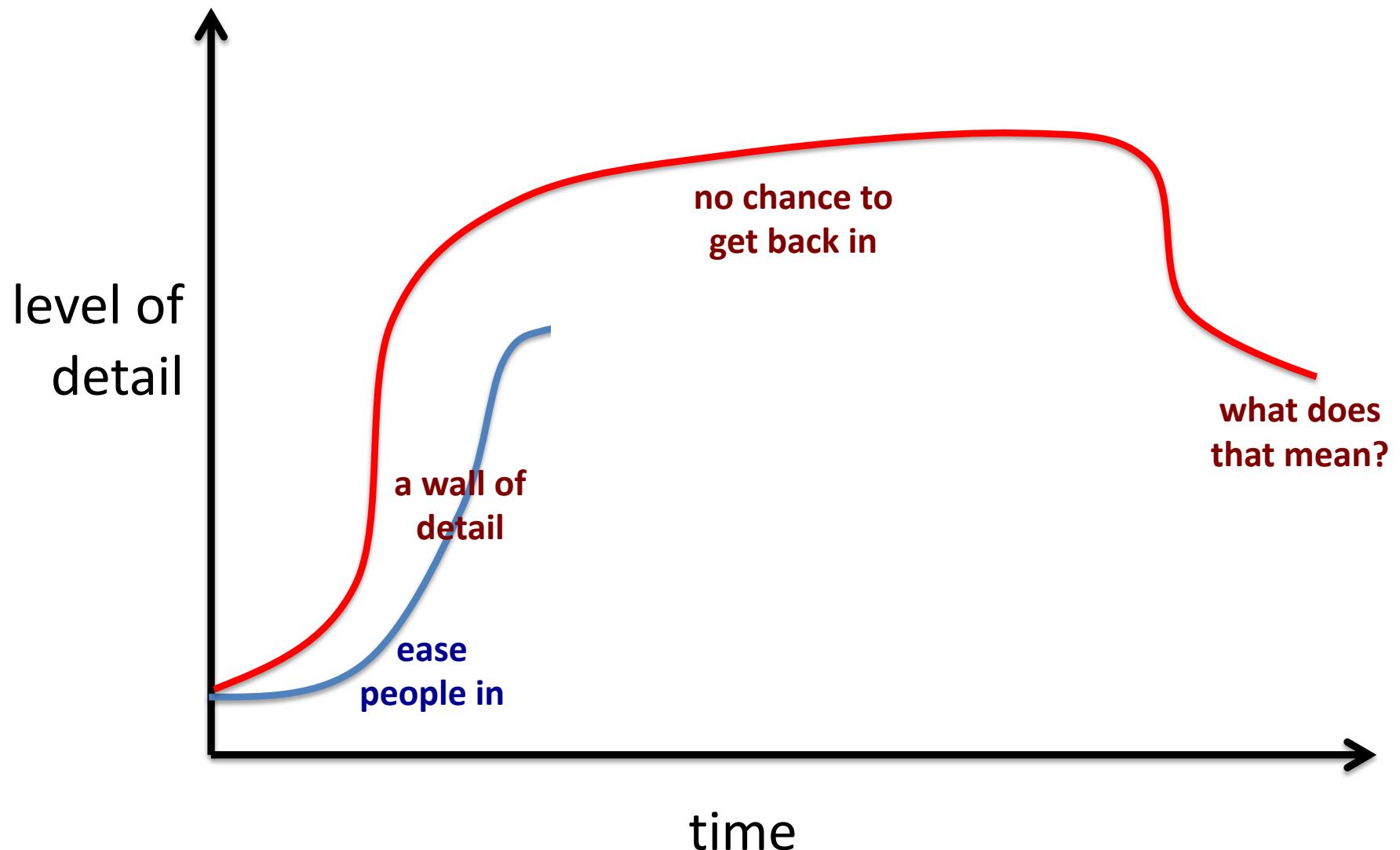


A photograph of a paved path made of light-colored rectangular stones, which curves from the bottom left towards the top right. The path is surrounded by vibrant green grass. In the background, there are more grassy fields and some dark, possibly rocky or shadowed areas.

Background
paves the way

the main content
working to fix the problem

The ‘curve of detail over time’





Your audience is human – connect by experiences

Ending well
Bring it back to the problem



How has your work changed the problem?

Slides are there to support your talk

Each element should have a purpose

Three routes of information

what you write



what you say



what you show



Using text

Only write what you want people to read

- That point has really been made
- I could have just said this
- and already this is too much text

Using Next Generation Sequencing to assess the diversity of MCMV and associated viruses in Mozambique

Your Name,
Research Assistant

Your Home Institution, Mozambique

SUPERVISORS: Someone Here, Someone Back-
Home

RESEARCH ASSISTANT: Another Person
Week 40/40

A viral diversity database to fight Maize Lethal Necrosis

Your Name

Your Home Institution

Your Research Group



A viral diversity database to fight Maize Lethal Necrosis

Your Name

Your Home Institution

Your Research Group

This is an interruption slide



Simple slides can mark progression

Titles of your slides

Slide titles should be useful statements

Tissues used for DNA extraction



DNA was extracted from leaves and roots



Not a useful home slide

- Introduction
- Objectives
- Methodology
- Results
- Conclusion
- Project output
- Impact pathways
- Acknowledgement

A more meaningful home slide

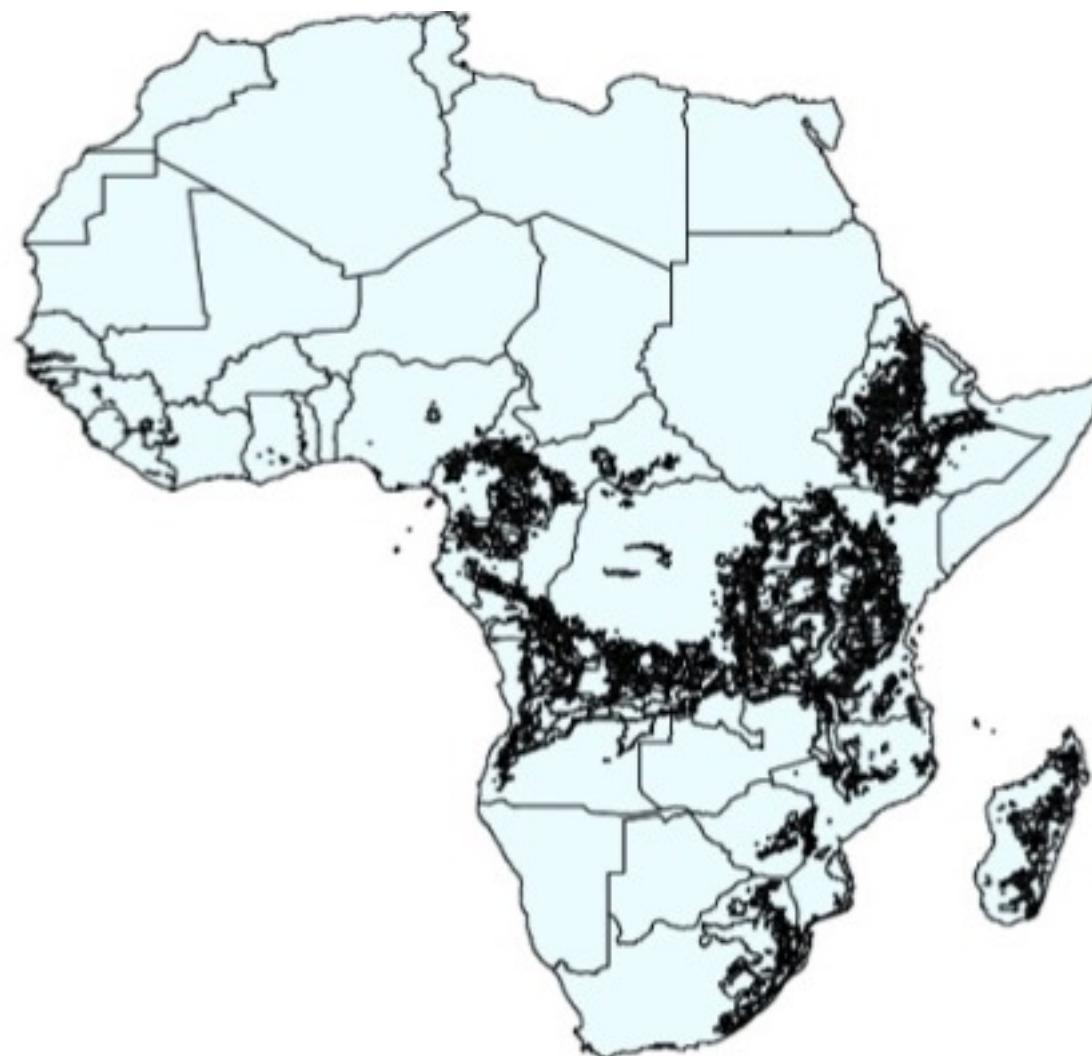
- MLN threatens food security in Africa
- Viral molecular diversity can help us predict virulence
- We have built a sequence database of MLN-associated viruses in Mozambique
- This can help farmers with selecting the most suitable maize genotypes

A more meaningful home slide

- MLN threatens food security in Africa



MLN is predicted to spread across Sub-Saharan Africa
(ASARECA, 2014)



Your home slide as a summary

- MLN threatens food security in Africa

Your home slide as an anchor

- MLN threatens food security in Africa
- Viral molecular diversity can help us predict virulence

Highlight the relevant section

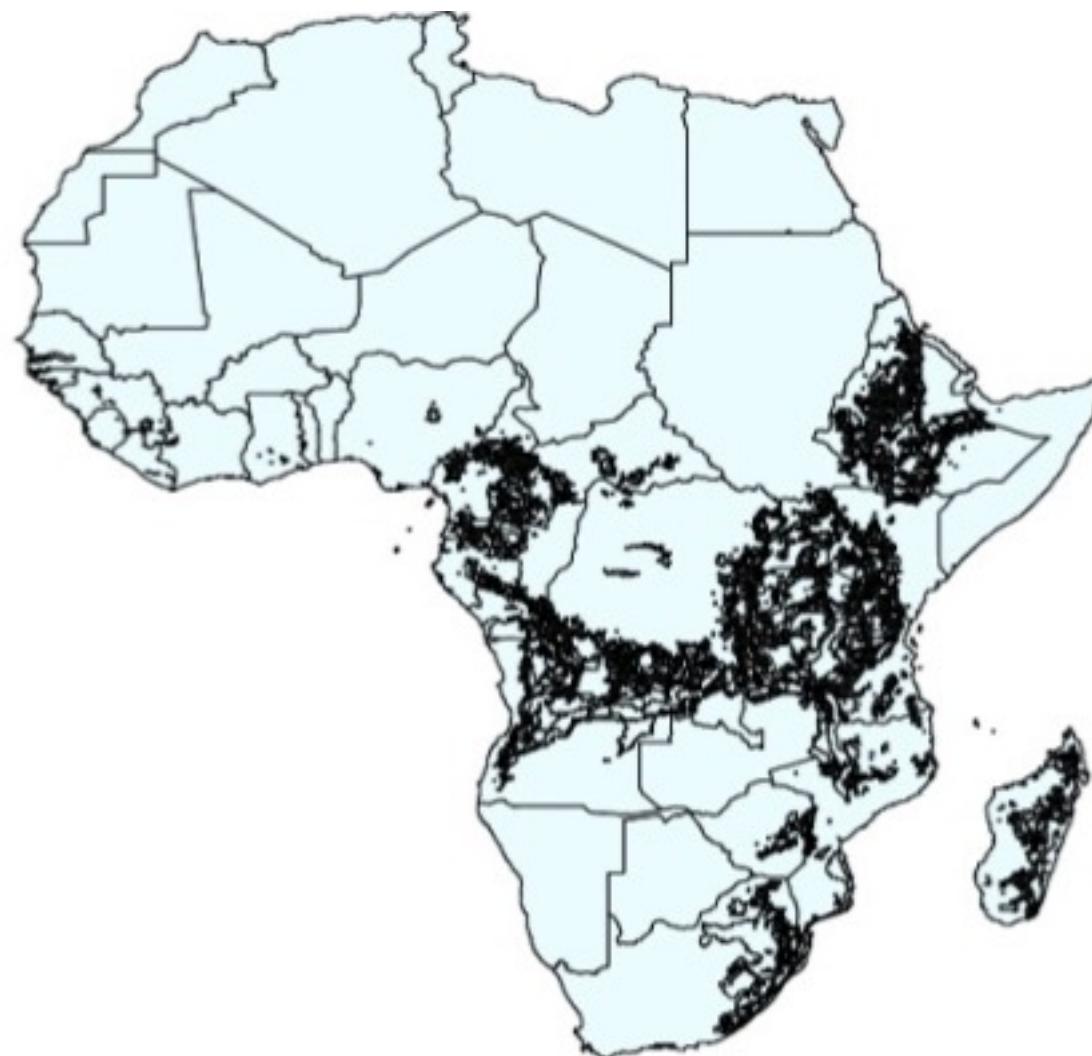
- MLN threatens food security in Africa
- Viral molecular diversity can help us predict virulence
- We have built a database of MLN-associated viruses in Mozambique

And your whole story is on it

- MLN threatens food security in Africa
- Viral molecular diversity can help us predict virulence
- We have built a database of MLN-associated viruses in Mozambique
- This can help farmers with selecting the most suitable maize genotypes

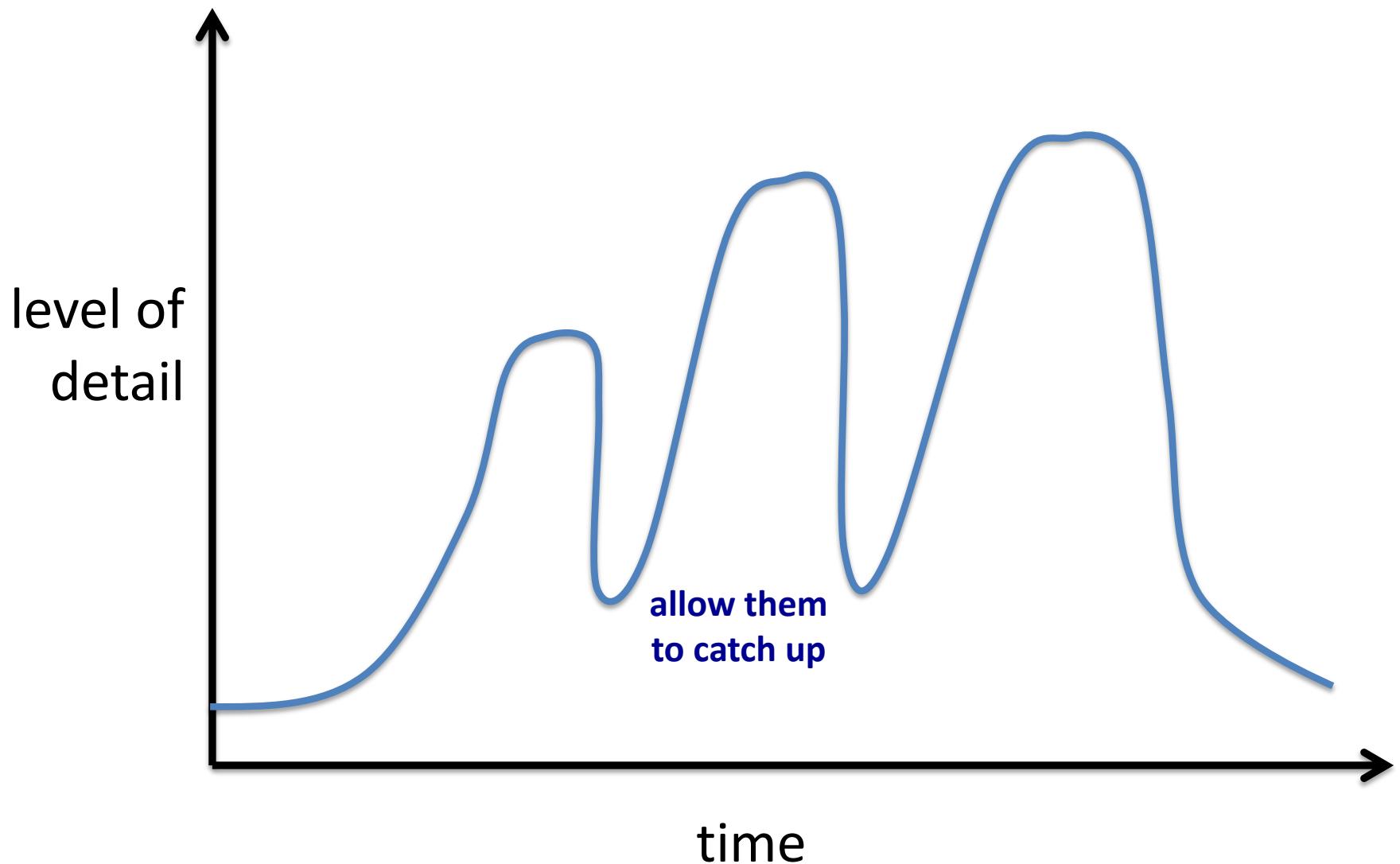
Images and graphics
communicate beyond words

MLN is predicted to spread across Sub-Saharan Africa
(ASARECA, 2014)





Slides can indicate levels of detail



It's very hard to see anything here

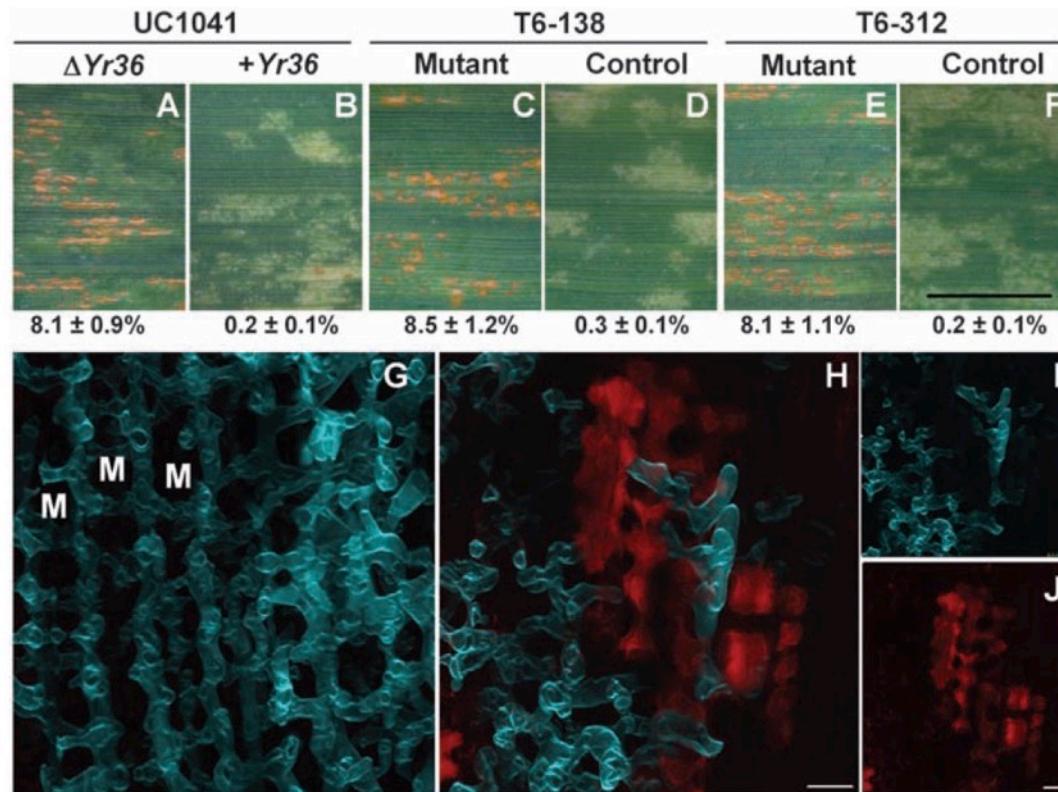
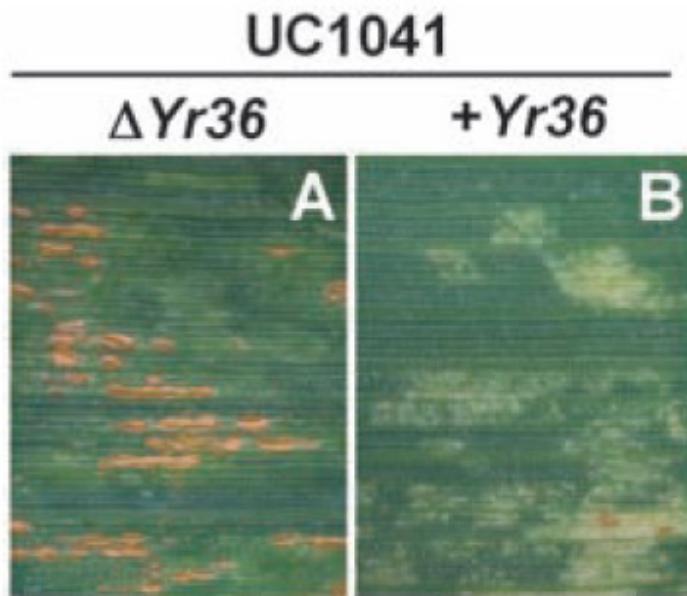
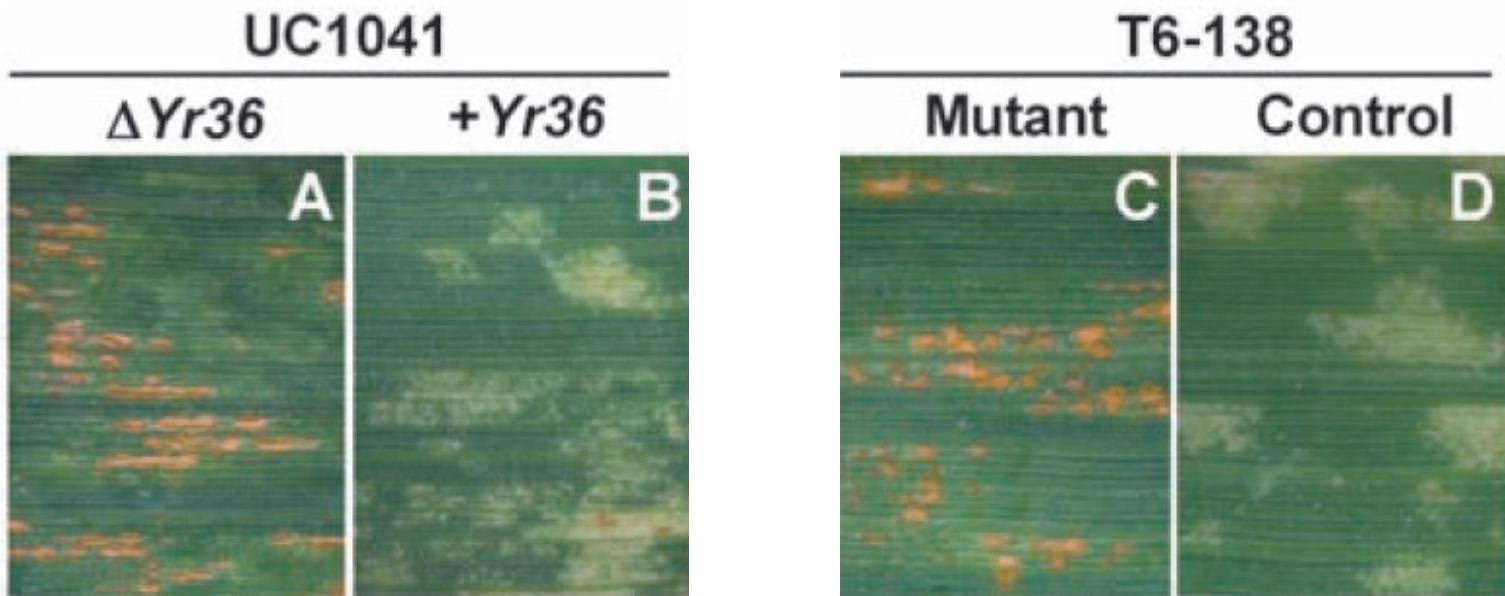


Fig. 2. Functional validation of *Yr36* by mutational analysis. (A to F) Leaf surfaces 11 days after PST inoculation. Scale bar, 5 mm. Numbers below leaves are average percent leaf area with pustules \pm SEM ($N = 8$, fig. S2). An analysis of variance (ANOVA) of the log-transformed data showed significant differences ($P < 0.01$) between mutant and control lines. (A) UC1041 without *Yr36*. (B) UC1041+*Yr36* isogenic line used for mutagenesis. (C and E) Lines T6-138 and T6-312 with homozygous mutations in the *WKS1* kinase domain. (D and F) Sister lines without the mutations. These and additional mutant lines are described in table S7 and figs. S6 to S9. (G and H) A dual-channel, confocal microscopic z-series inside a wheat leaf 13 days after PST inoculation. Scale bar, 20 μ m. The fungus stained with Uvitex 2B (Polysciences Inc., Warrington, PA; false-color blue) and autofluorescing wheat leaf cells (false-color red) are visible. (G) The susceptible T6-312 mutant has an extensive mycelial network in which each (invisible) plant mesophyll cell (selected cells shown as M) is encircled by a hypha. (H) The T6-312 control line has a poorly developed fungal network surrounded by autofluorescent mesophyll cells that presumably were involved in the resistance response. (I and J) Separate channels of (H). Scale bar, 20 μ m.

But here you know what you need to look at

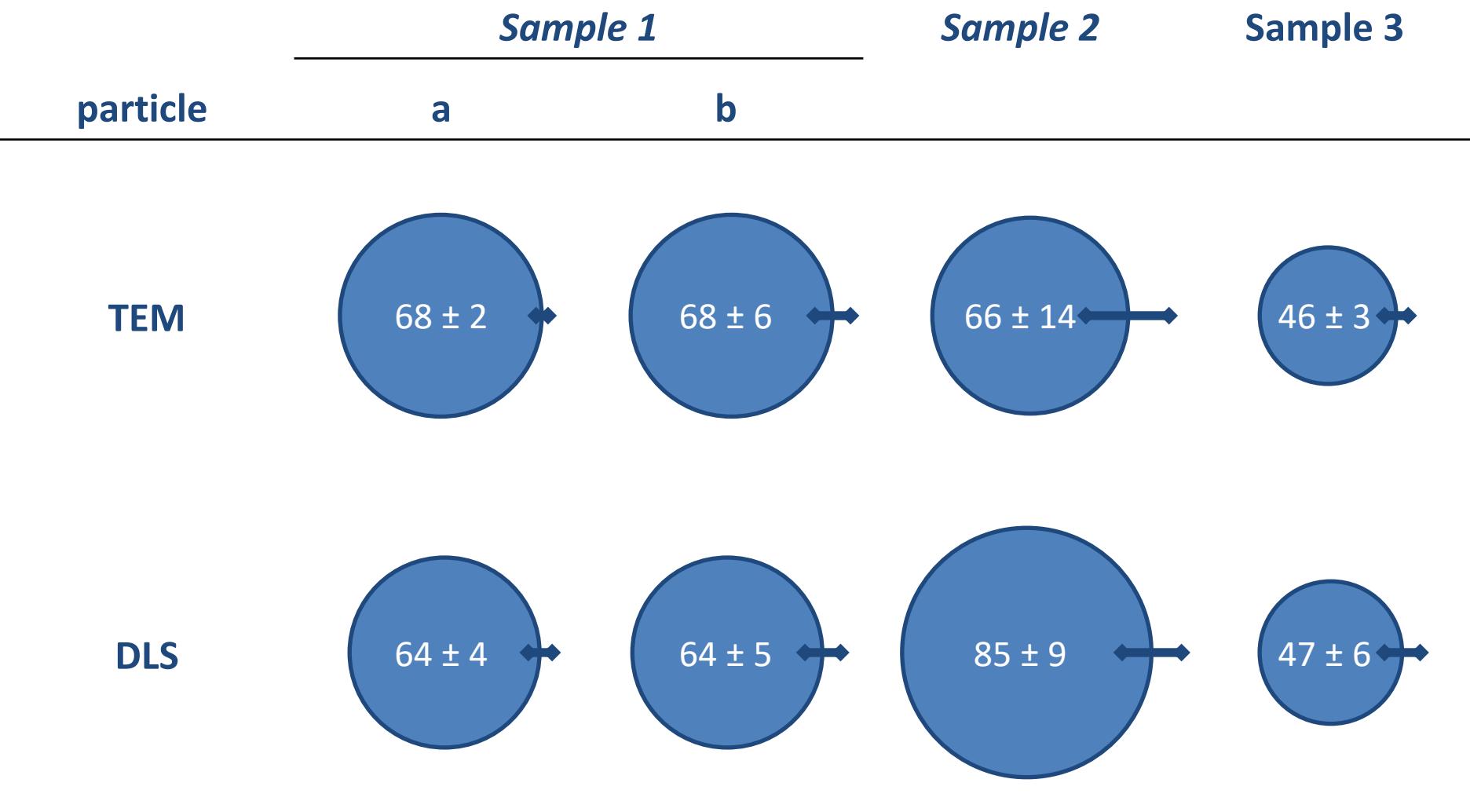


Keep your slides in balance



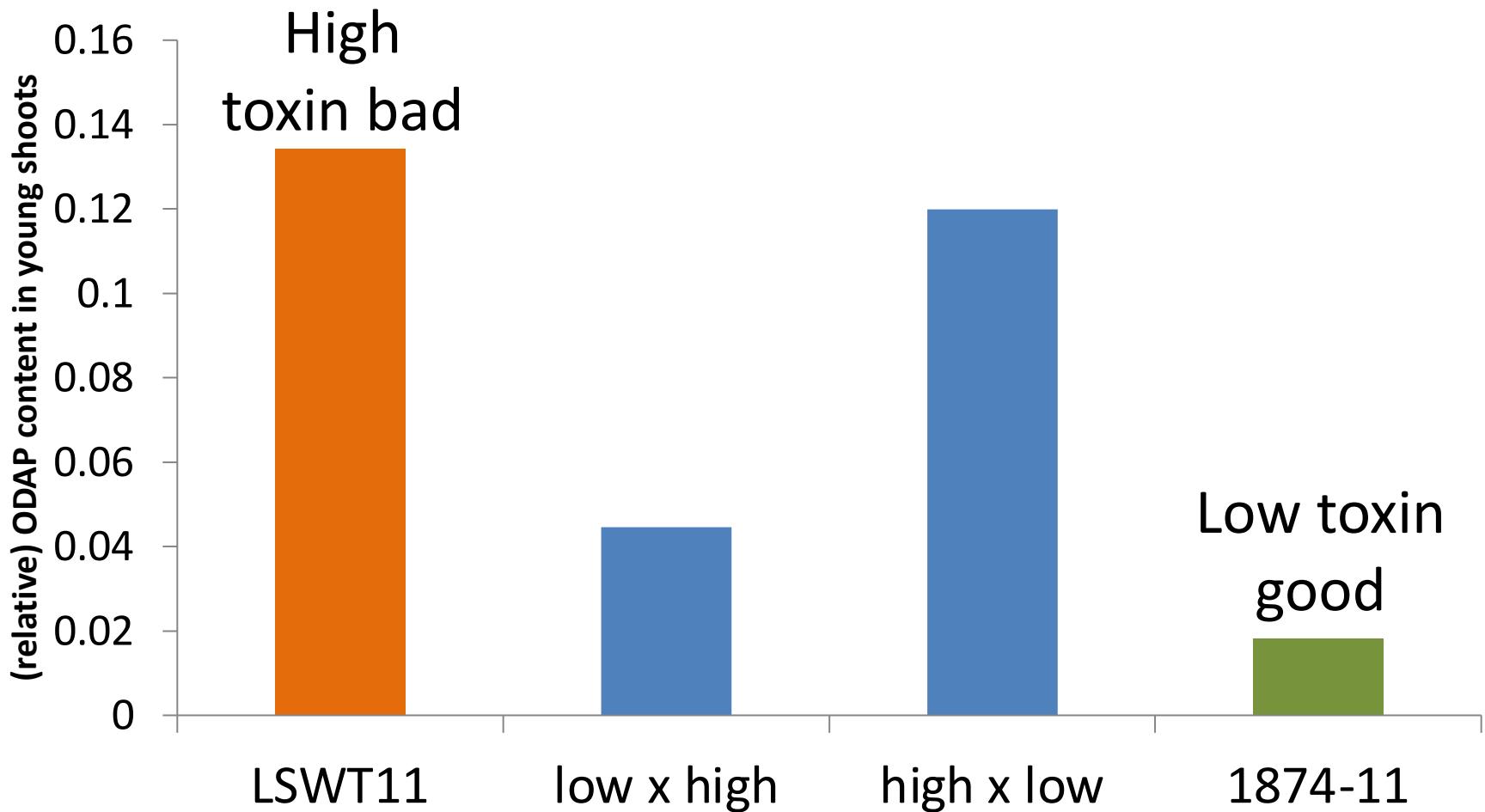
tables take time to interpret

	<i>Sample 1</i>		<i>Sample 2</i>	<i>Sample 3</i>
	a	b		
TEM β particle (nm)	68 ± 2	68 ± 6	66 ± 14	46 ± 3
DLS β particle (nm)	64 ± 4	64 ± 5	85 ± 9	47 ± 6



Graphics are more intuitive

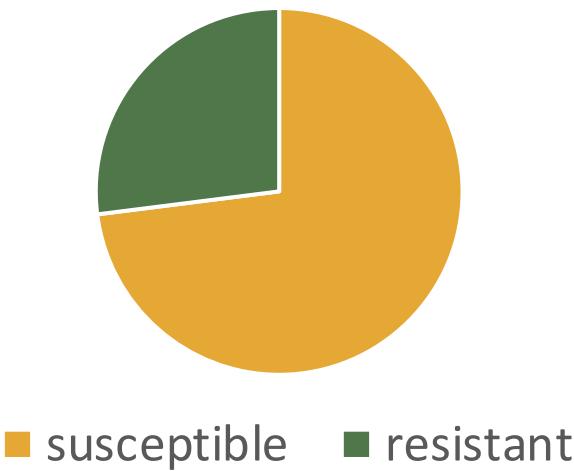
Colours carry associations



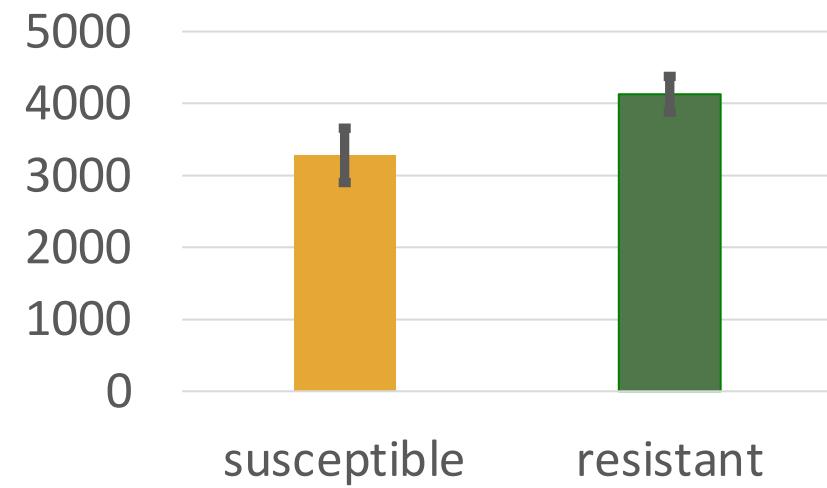
Resistant Susceptible



% of varieties



average yield in kg/ha



Don't use technology that distracts

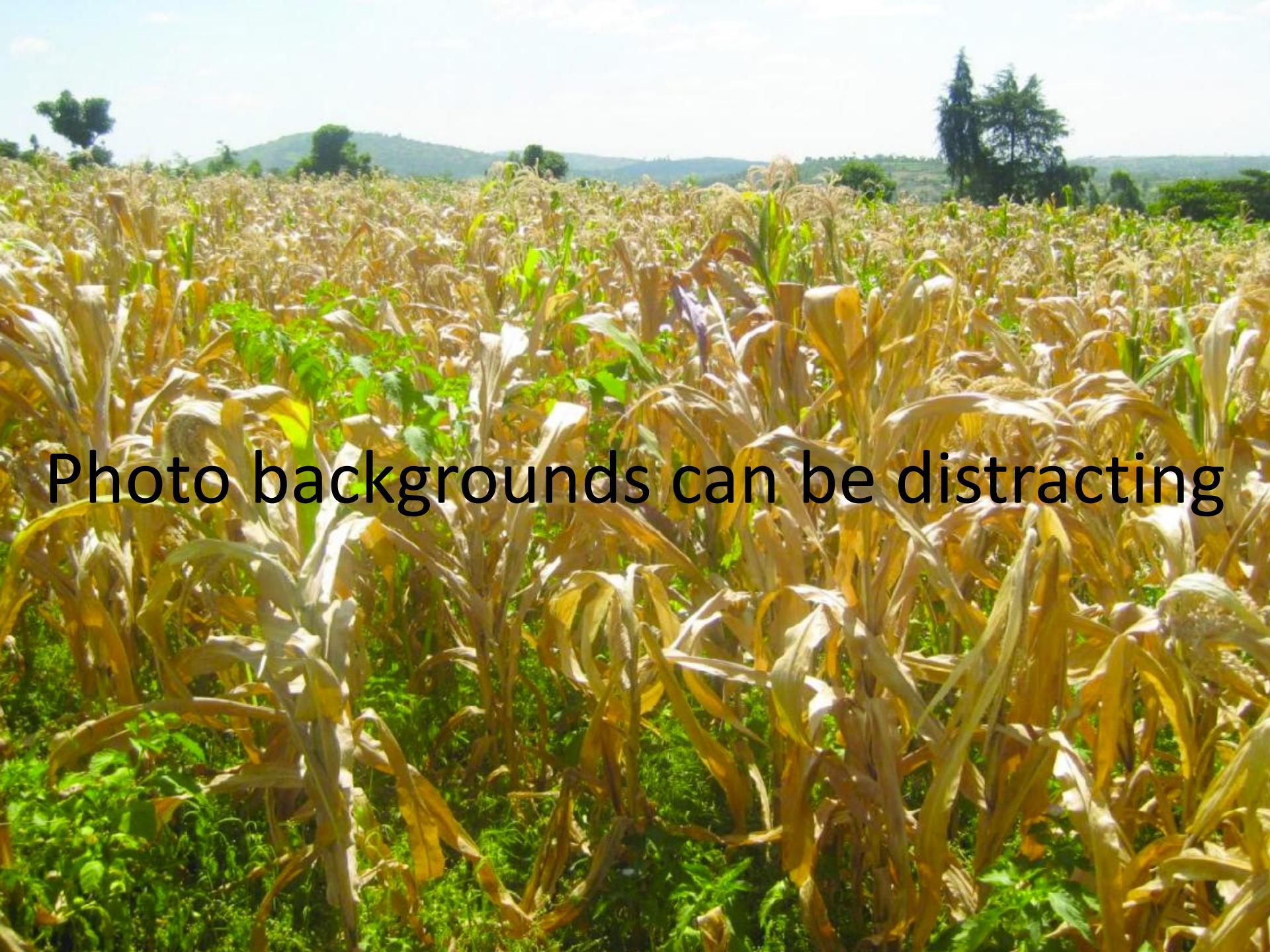
A photograph of a cornfield. The foreground is filled with tall, yellowish-brown corn stalks and some green weeds. In the middle ground, the field extends towards a range of green hills under a clear blue sky. The lighting suggests a bright, sunny day.

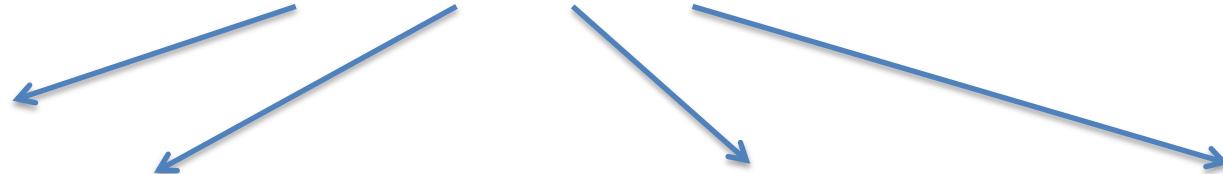
Photo backgrounds can be distracting

Elements you can do without

All of these



John Innes Centre



17/08/2022

slides design seminar

53

Animations are often not useful

Moving things will attract a lot of attention

Always check your animations!



conventional breeding?



genetic engineering?



reverse genetics?

PowerPoint Datei Bearbeiten Ansicht Einfügen Format Anordnen Extras Bildschirmpräsentation Fenster Hilfe 32% Thu 20 Aug 11:31

slides design presentation.pptx

In der Präsentation suchen

Bildschirmpräsentation wiedergeben Referenten tools

Von Anfang an Ab der aktuellen Folie

Referentenansicht Durchlaufprobe Präsentation aufzeichnen

Aktionseinstellungen Folie ausblenden Präsentation einrichten

Kommentare wiedergeben
Anzeigedauern verwenden
Mediensteuerelemente anzeigen

Einstellung für zwei Anzeige Referentenansicht Präsentation

Folien Glieder.

68

There are some silly transistors.

69

And again, you don't need them.

70

I only use "Fade".

71

Always use the presenter view

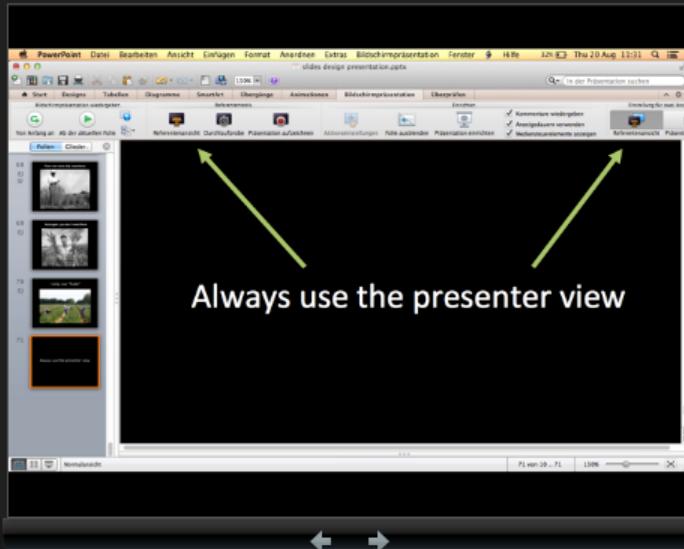
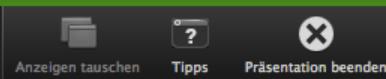
Always use the presenter view

Normalansicht

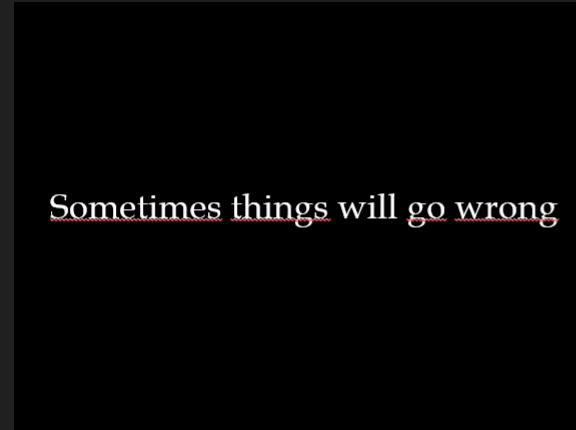
71 von 10 .. 71 150%

The screenshot shows a Microsoft PowerPoint presentation window. The title bar indicates the file is named 'slides design presentation.pptx'. The ribbon menu is visible with tabs like Start, Designs, Tabellen, Diagramme, SmartArt, Übergänge, Animationen, Bildschirmpräsentation, Überprüfen, and Überprüfen. The 'Bildschirmpräsentation' tab is selected. On the left, the slide navigation pane shows slides 68, 69, 70, and 71. Slides 68, 69, and 70 each contain a small image of a person in a field. Slide 71 contains a text box with the text 'Always use the presenter view'. Two large green arrows point upwards from the top edge of the slide area towards the top center of the screen. The status bar at the bottom shows 'Normalansicht', '71 von 10 .. 71', and '150%'.

11:36



Always use the presenter view



|| Verstrichen
0:00:48

If you need notes to remind you what to say
– use the notes section, not the slide
Try out beforehand that the notes are big
enough for you to read and fit on the screen

Here you can make discussion notes

Sometimes things will go wrong

Keep an eye on the time

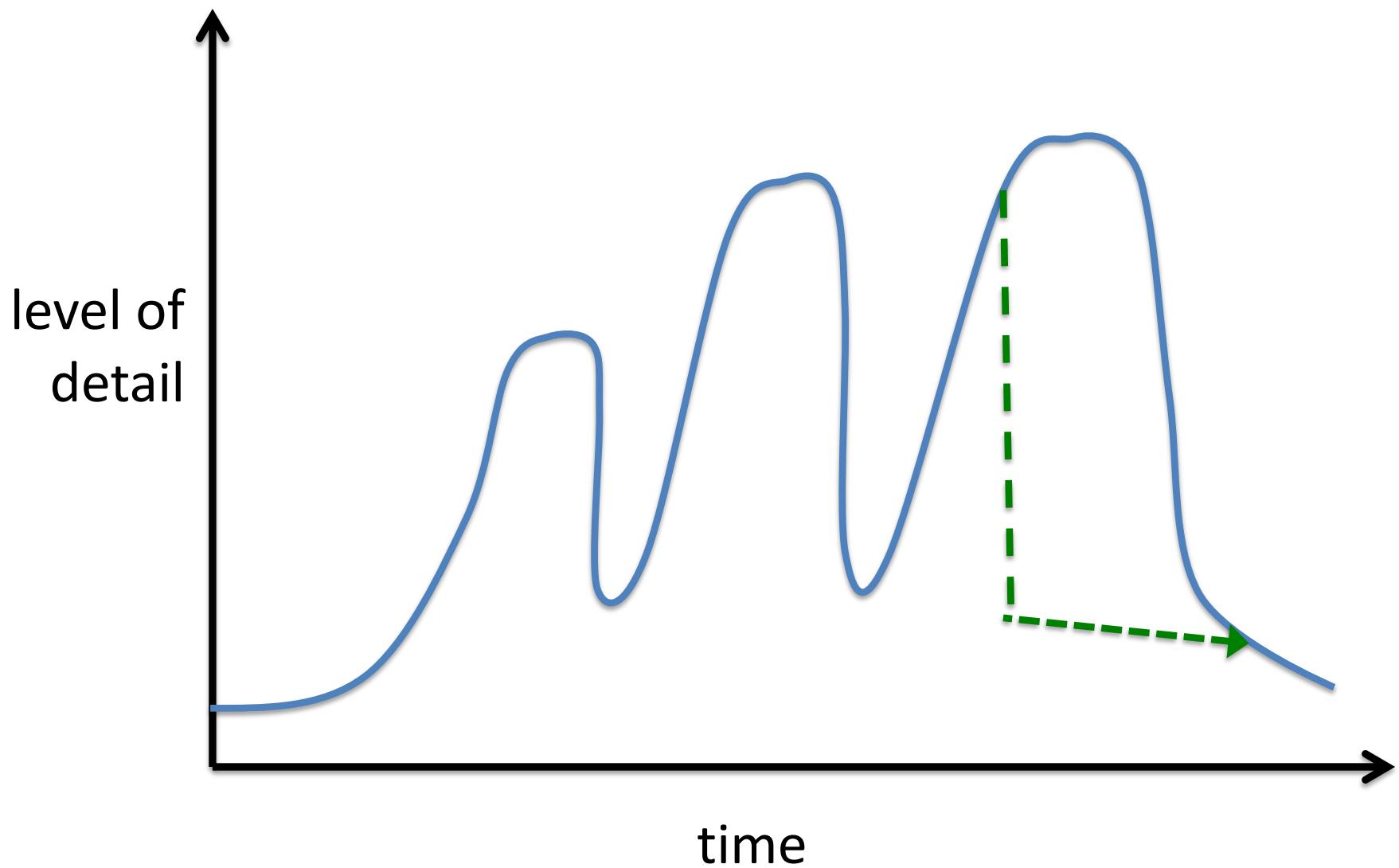


During practice



And during your talks

if you have to: skip to summary

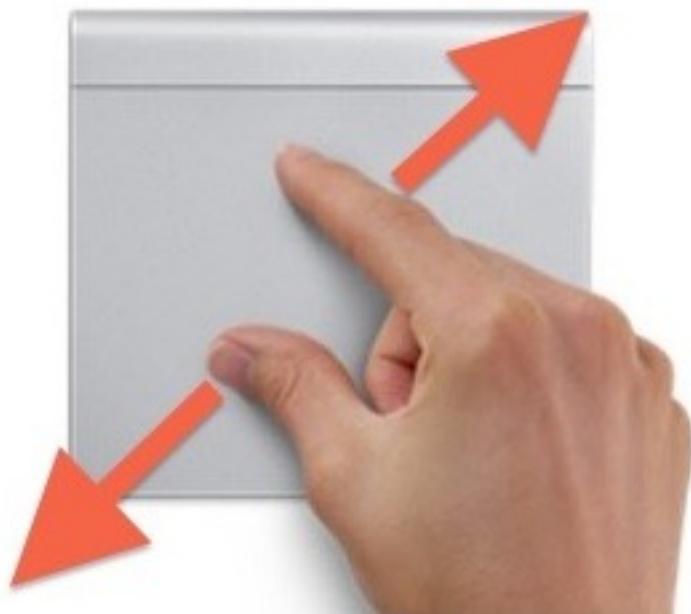


Answering questions



Two types of questions

Zoom In



Zoom Out



osxdaily.com

You don't have to
know everything

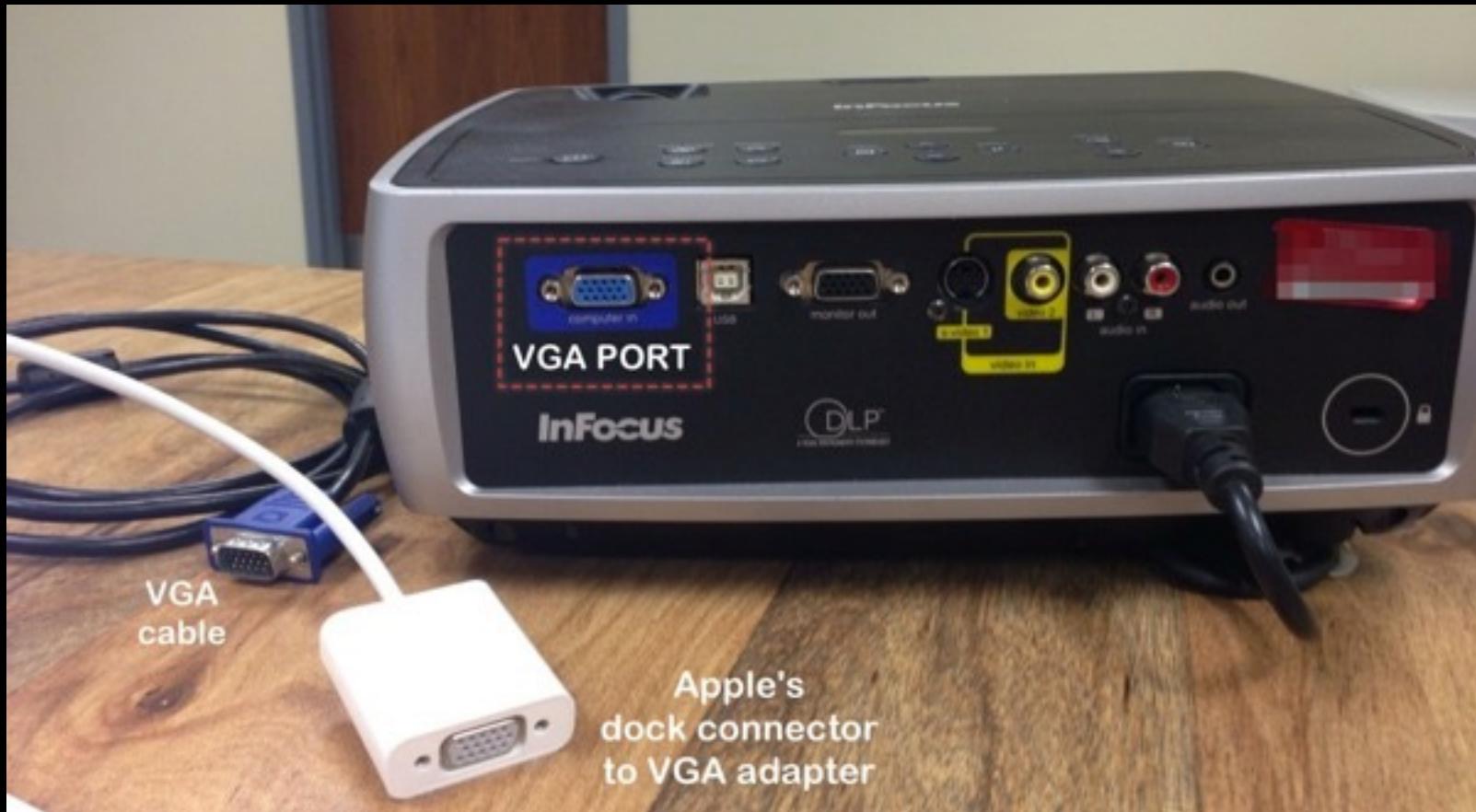
Practise is vital



Find your way of practising



test your technology



Summary

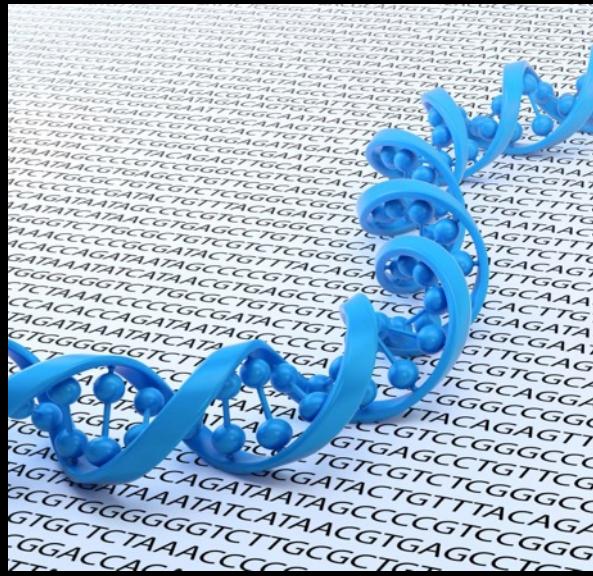
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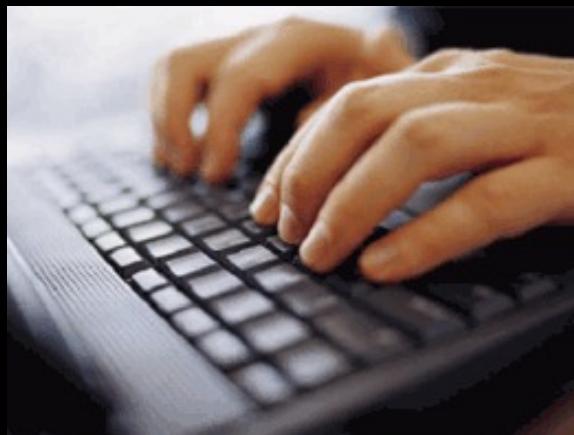


The Problem

The Impact



Slides are there to support your talk



Thank You!

Acknowledgements

Speaking training

- John Bates
- Stephen Bornemann
- Jens Maintz

Example slides

- Cristobal Uauy
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- Tilly Eldridge



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