Scientific Presentation:Tricks and Tips

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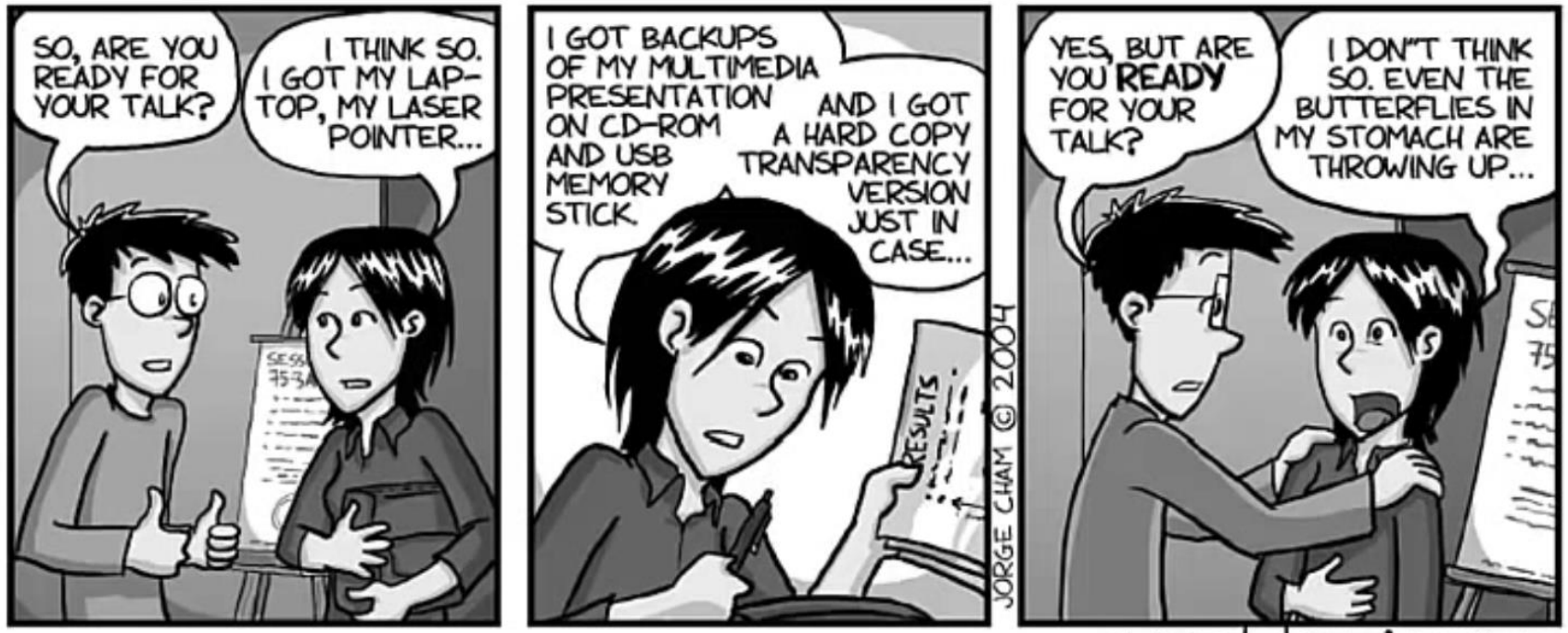
Be prepared!

SanDisk


SO, ARE YOU READY FOR YOUR TALK?
I THINK SO. I GOT MY LAP-TOP, MY LASER POINTER...
I GOT BACKUPS OF MY MULTIMEDIA PRESENTATION ON CD-ROM AND USB MEMORY STICK.
AND I GOT A HARD COPY TRANSPARENCY VERSION JUST IN CASE...
RESULTS
JORGE CHAM © 2004
YES, BUT ARE YOU READY FOR YOUR TALK?
I DON'T THINK SO. EVEN THE BUTTERFLIES IN MY STOMACH ARE THROWING UP...
www.phdcomics.com

Length of talk

- 12-15 minutes
  - Contributed conference talks
  - Most difficult!!
  - Limit talk to 10 minutes
  - Only make 2-3 points
- 30 minutes
  - Invited conference talks
  - Journal club presentations
  - Limit talk to 20 minutes
- 60 minutes
  - Invited talks
  - Special seminars
  - Limit talk to 50 minutes

Outline

- Before you start preparing your talk
  - Know your audience
  - Know the length of your talk
  - Know the style of your talk
- Preparing the talk
  - Choosing and organizing the content
  - Preparing slides
  - Don’t overdo methods part of talk
- Giving the talk
  - Grab and hold audiences attention

Giving the best possible talk

- Make eye contact
- Don’t have nervous tendencies
  - Pacing, bobbing, waving arms, jingling coins, etc.
- Hold pointer still
  - Don’t point directly at overhead on projector
- Enunciate
  - Make yourself slow down if necessary
- Avoid “uh”, “like”, “um”, “okay” etc
- Be enthusiastic
- Don’t block the screen
  - Project as high as possible

Giving the best possible talk (cont)

- Face the audience
- Do not read what is on your overheads verbatim
- Never allow a blank screen to flash by
  - However, don't leave a slide up too long – put a black slide up if necessary
- Try to relax
  - Can be difficult
- Do NOT go over allotted time
  - Don't end with "I guess that's it"
  - Will get cut off at meetings

It's a capital crime to exceed your allotted time

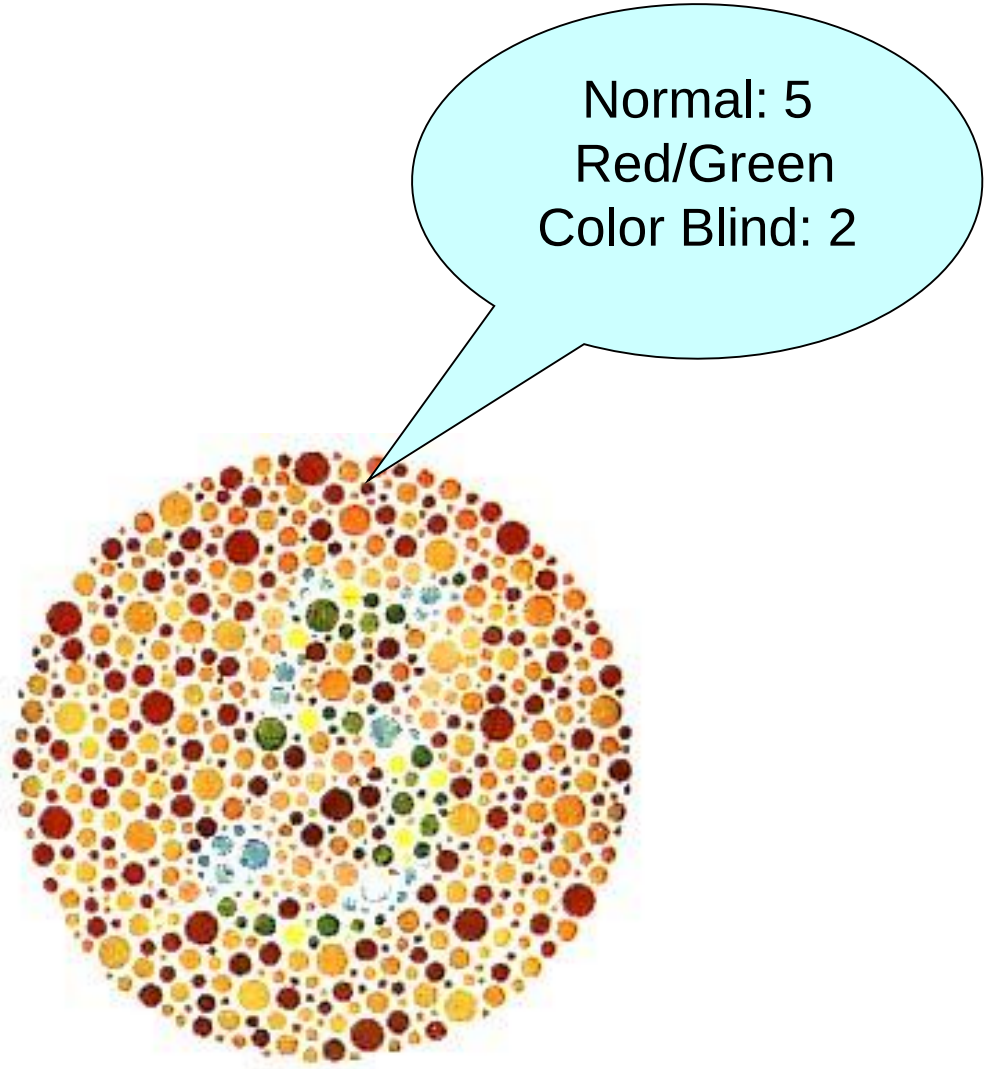
Outline

- Introduction
- Experimental
- Results
- Discussion
- Conclusions
- Future Work
- Do not over-run

  allow time for questions
- Save hands-outs to the end

Outline

- Don’t overuse “gee whiz effects”
  - Make sure material is relevant
- Use simple backgrounds
- Use “normal” fonts
  - At least 18 pt (24 better) – this text is 28 pt
- Use “normal” colors
  - Do not use red and green as contrasting colors
  - Only use for emphasis
  - Check before using!!!
- Don’t use this outline!!!
  - 45 wasted seconds



The Presentation

- Chose a **title** that is short and informative
  - *"Cute" or "Sexy"* titles are often poor titles
- Determine the level of **knowledge** of the audience
  - who did the research?
  - don't overestimate the audience
- Don't try and include too much **information**
  - 1 min rule
  - technical terms
  - limit text

Using Text on your slides

- BIG
- SIMPLE
- CLEAR

BIG

- Can you see me at the back?
- 28 or 32pt font

- Don’t use complete sentences
- Don’t use abbreviations or acronyms

- Try and keep all font sizes the same

SIMPLE

- No more than 6 lines
  - use bullet points
- 7 words per line
  - Avoid trying to squeeze too much information on to one slide or bullet point so that the audience have to strain to be able to read what you have written. While they are concentrating on trying to read the book that you have tried to fit on the page you will find that they tend not to be listening to what you are actually saying to them.
  - If you write too much you tend to end up reading it anyway, which can be distracting
  - “keywords”

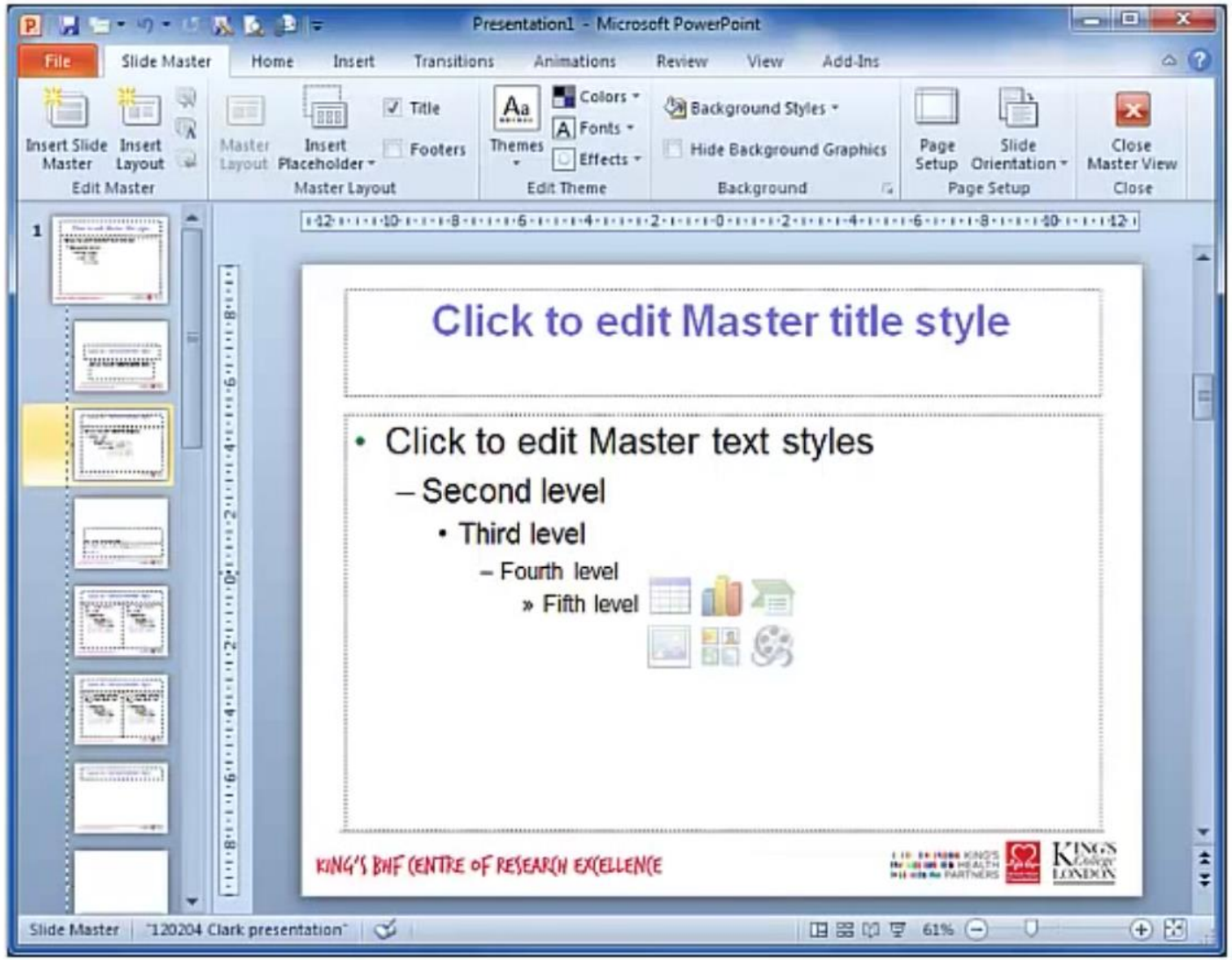
CLEAR

- Arial or Helvetica
  - Avoid **m**i_xing ***F***onts within a slide or between slides
  - *Do not use "scripted fonts" as they're quite hard to read!*
- Simple background
  - single colour or gradient
- Avoid over-use of fancy animations
- Chek yoru spelling!

COLOURS and EFFECTS

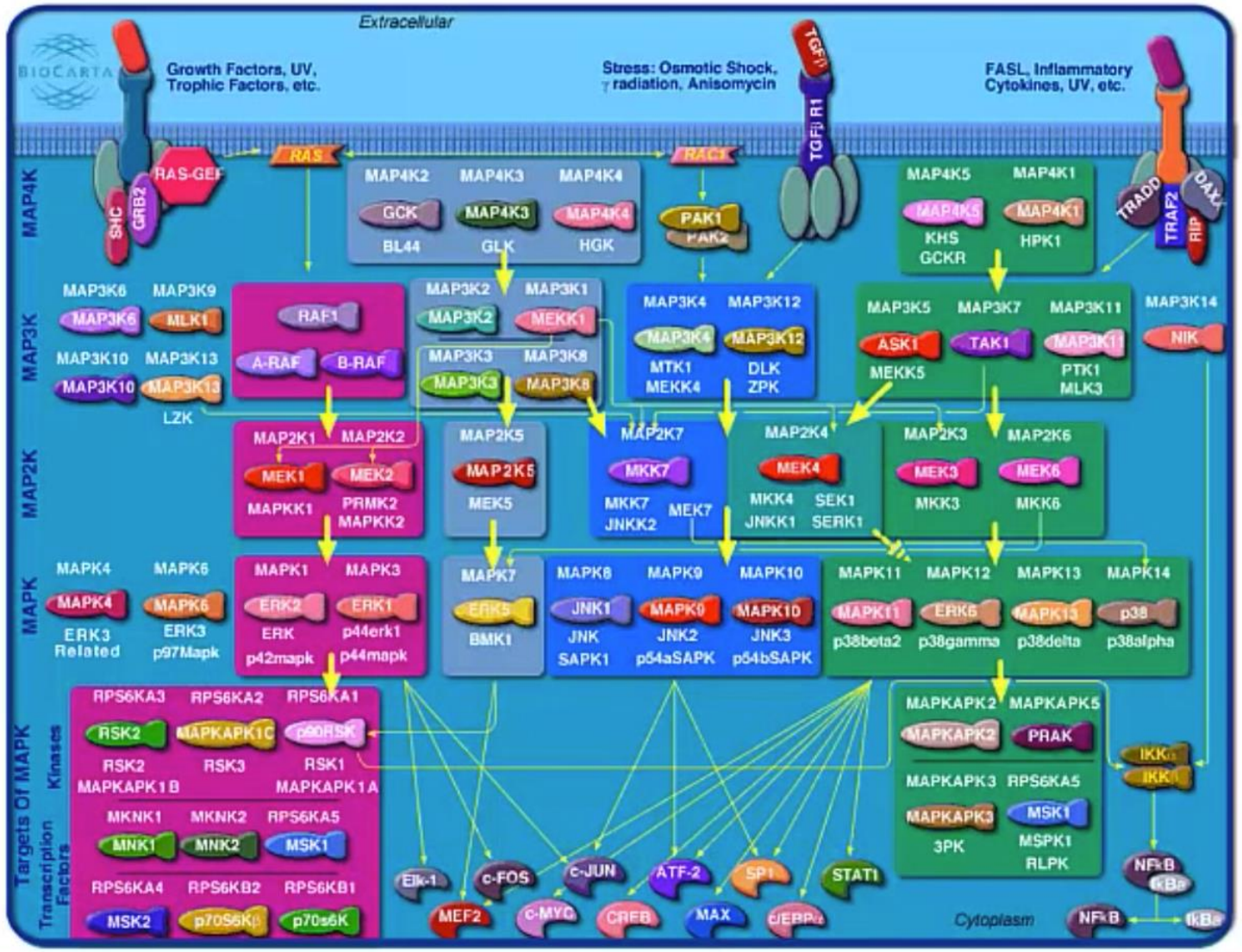
- It may be YOUR favourite colour, but think of the audience
  - Some colours are hard to read
  - Others just look terrible!
- Clever text formatting rarely works
  - **Avoid shadows and reflections**
- Use traditional colour schemes
  - Black on white
  - Yellow/white on blue

Use the “Master” Layout



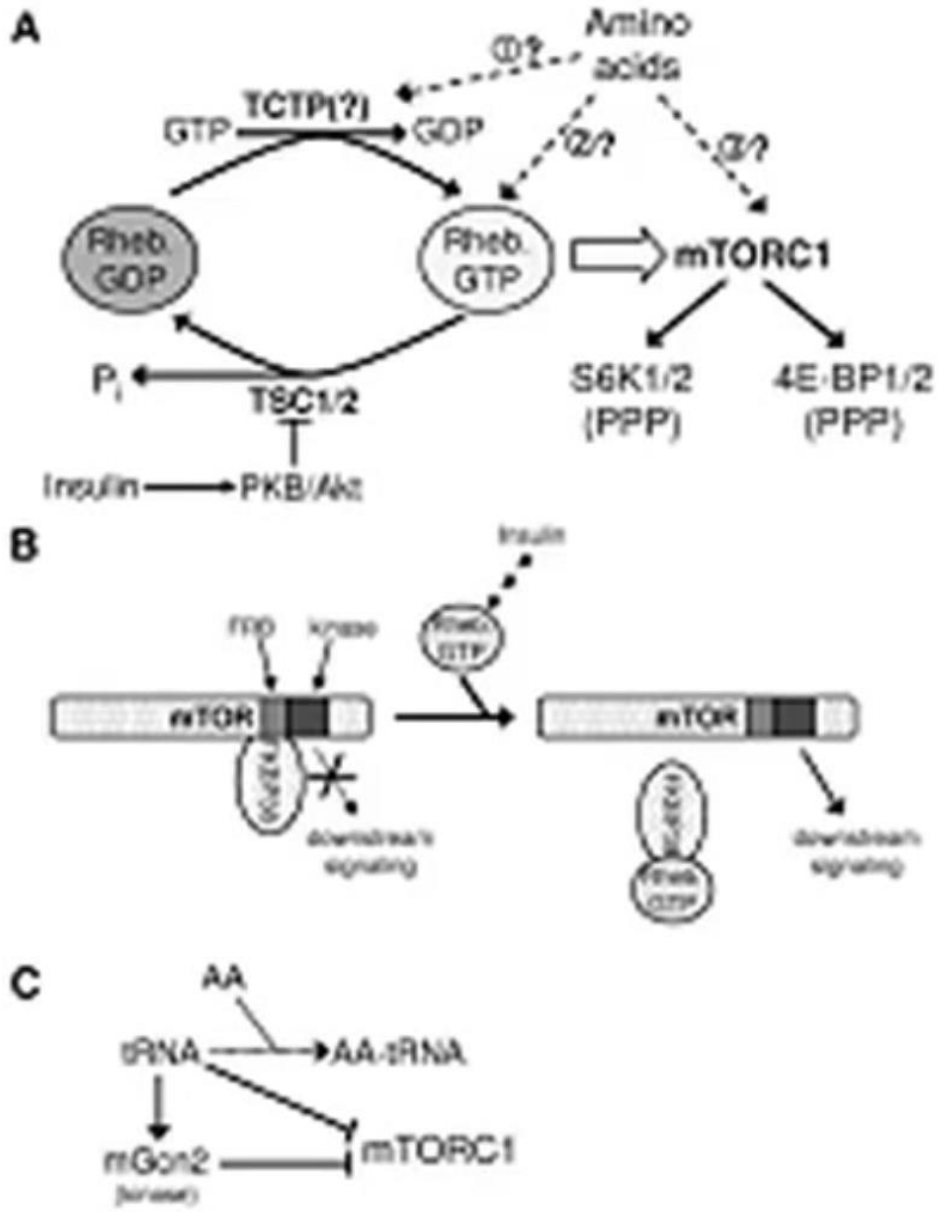
And **THEN** start setting up your slides

Inserting graphics



What is wrong with this picture?

Using images from publications



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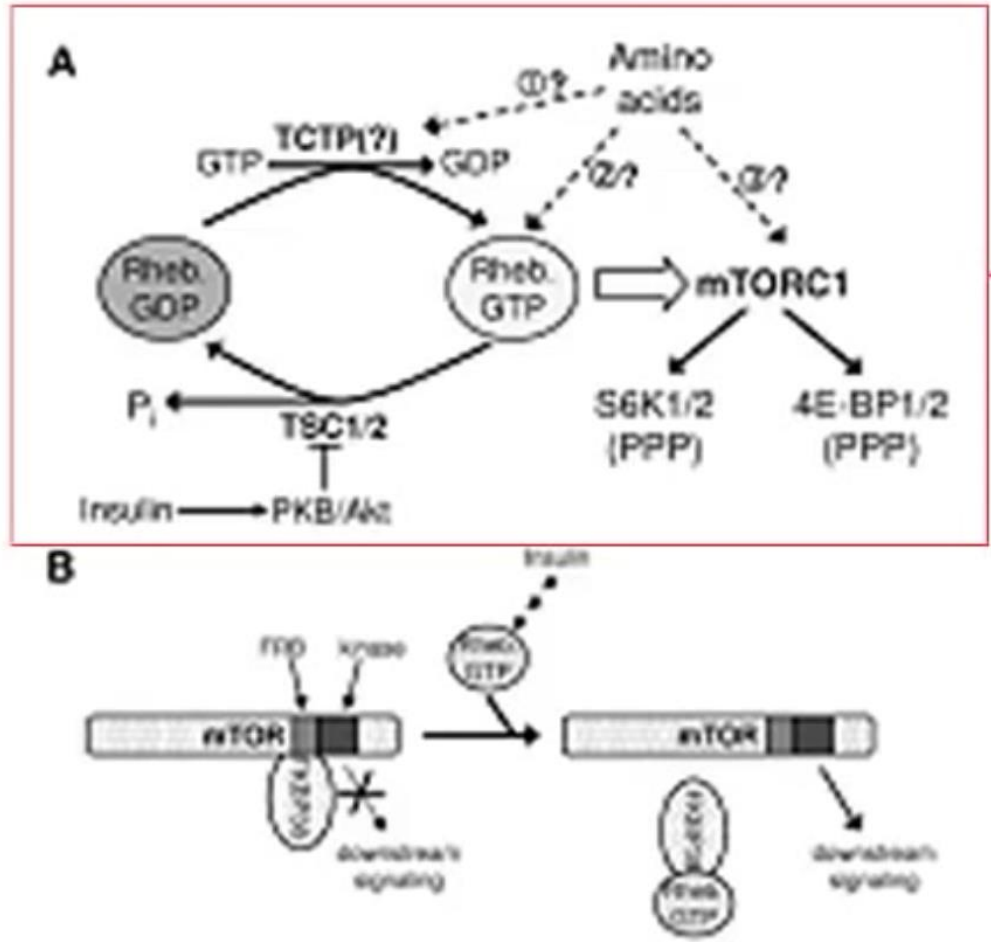
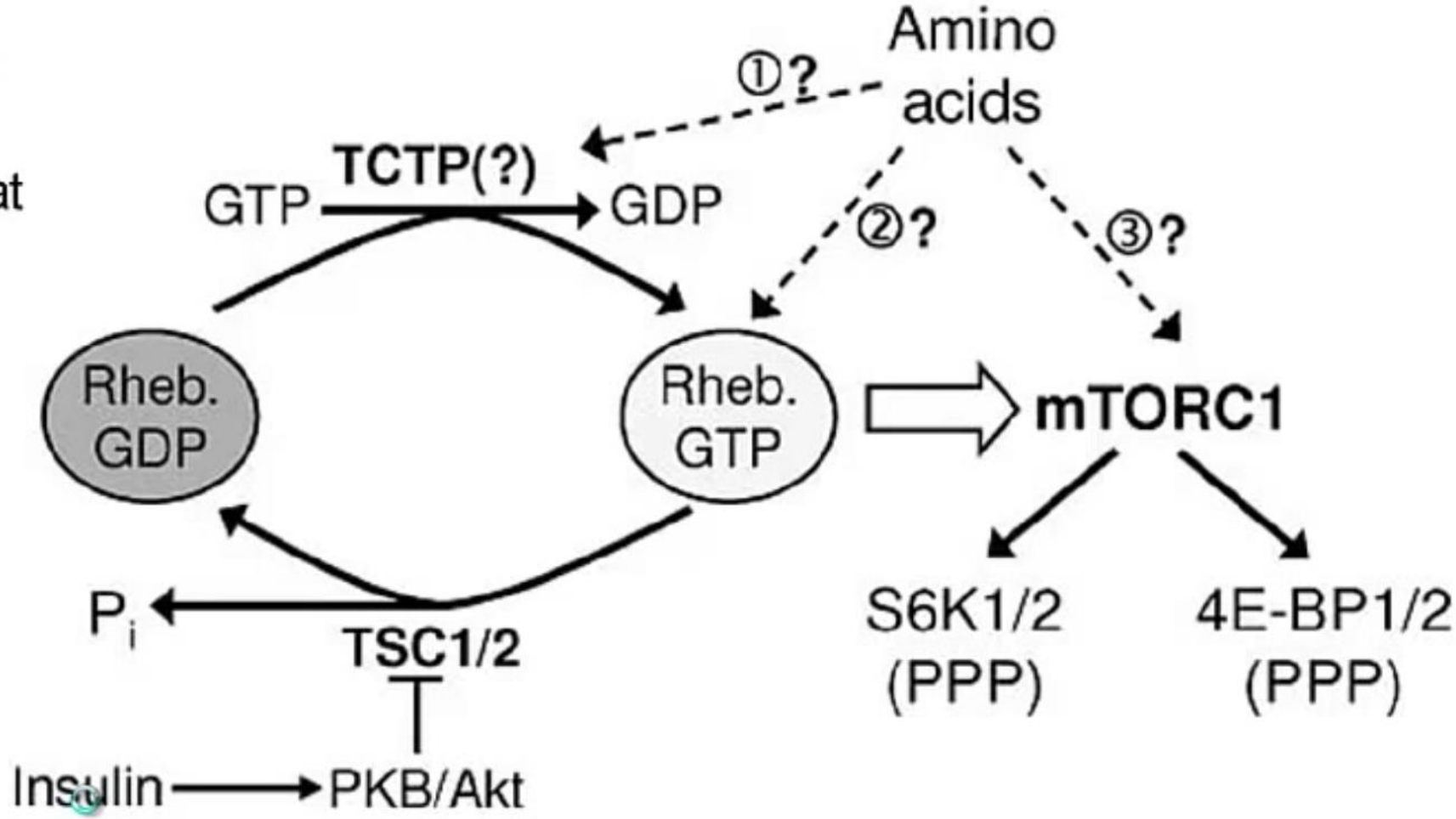


What is the message

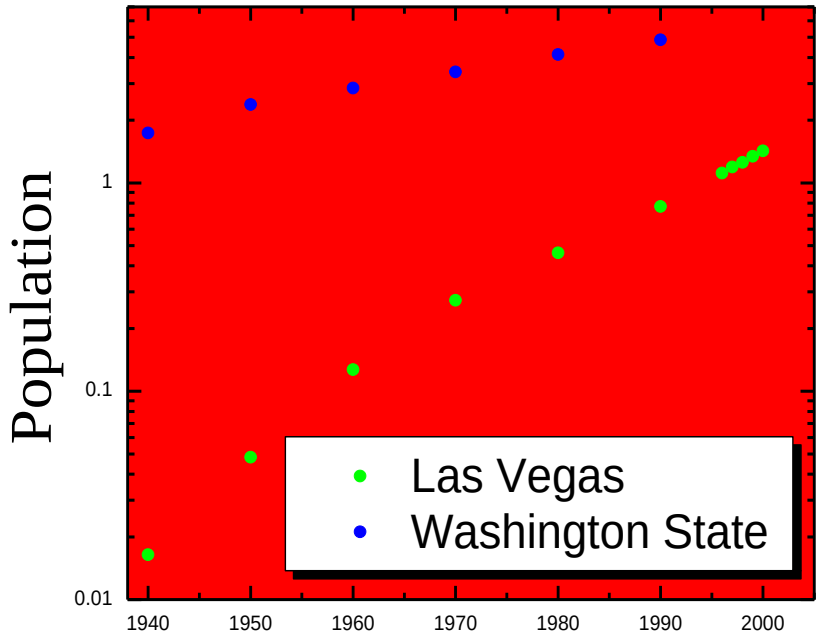
Focus on the important information

(crop the rest)

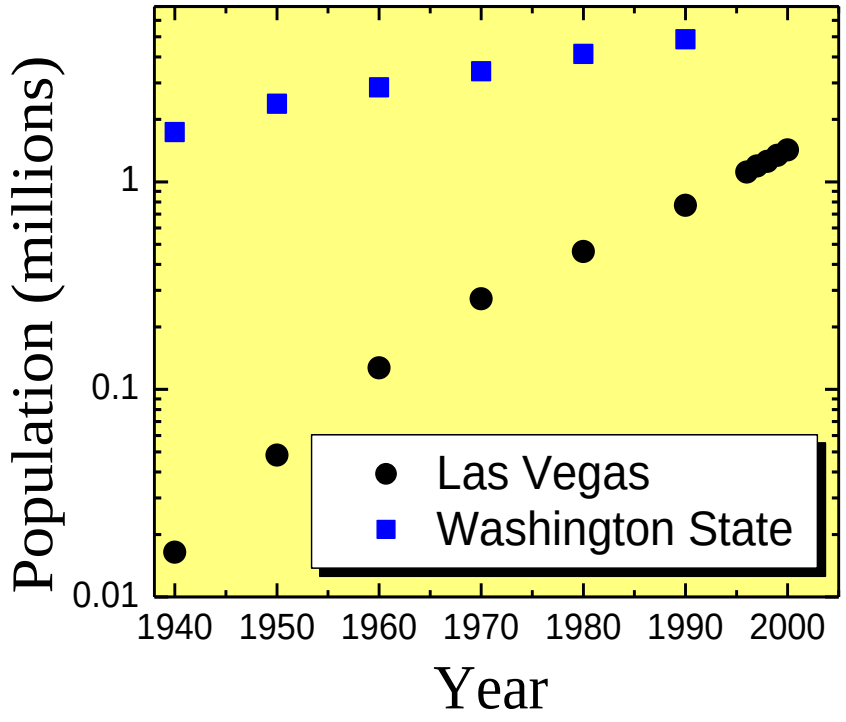
Hide bits that are not important



Making a decent figure



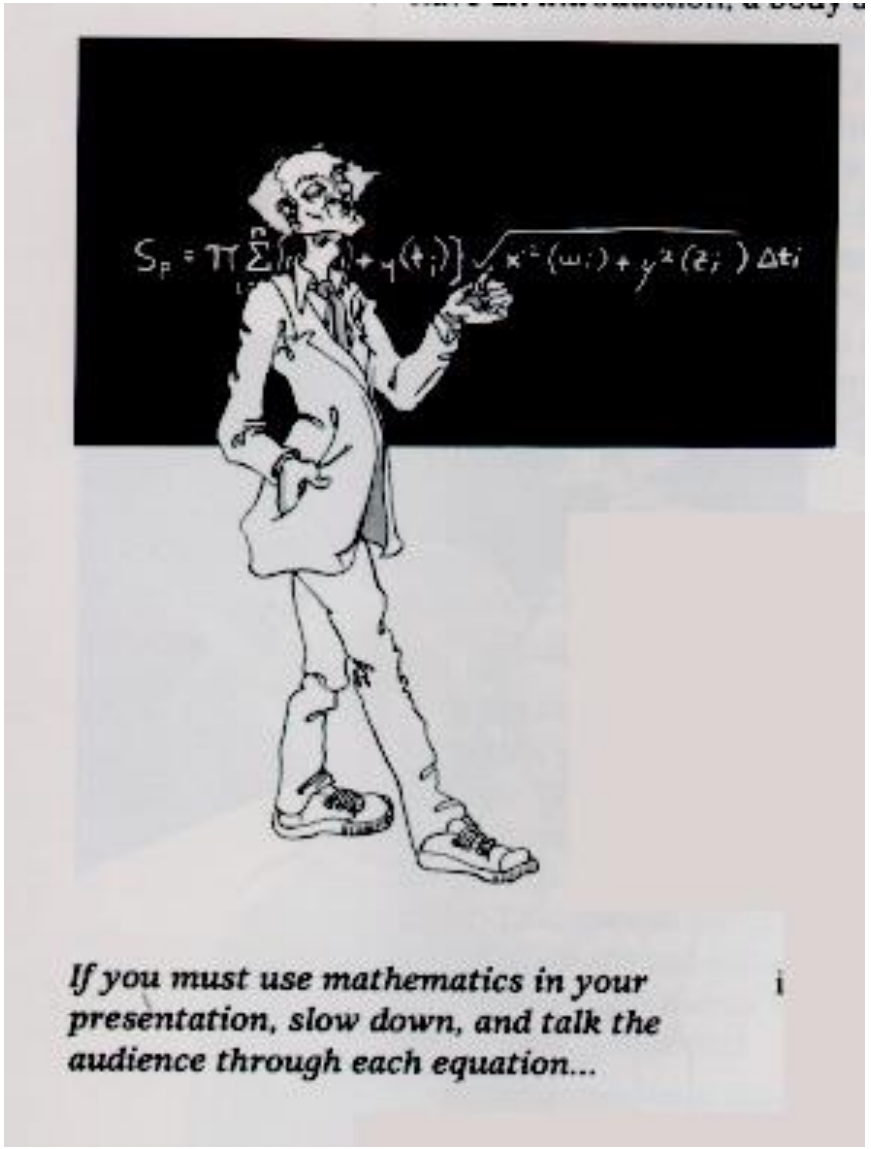
Bad



Better

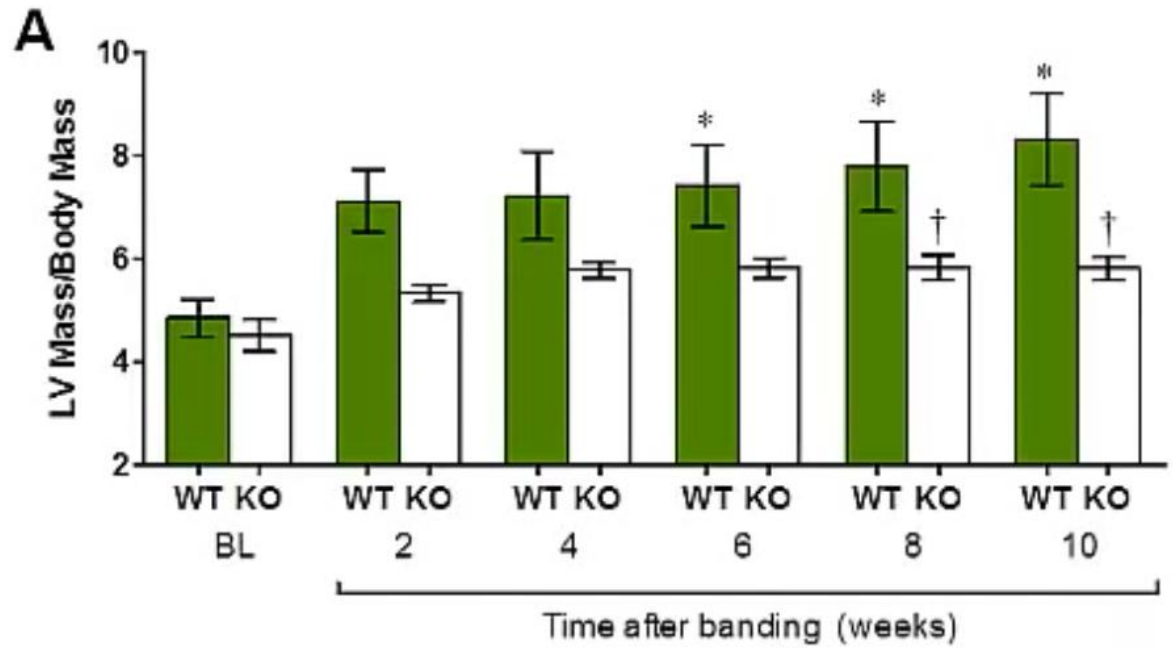
More on graphics

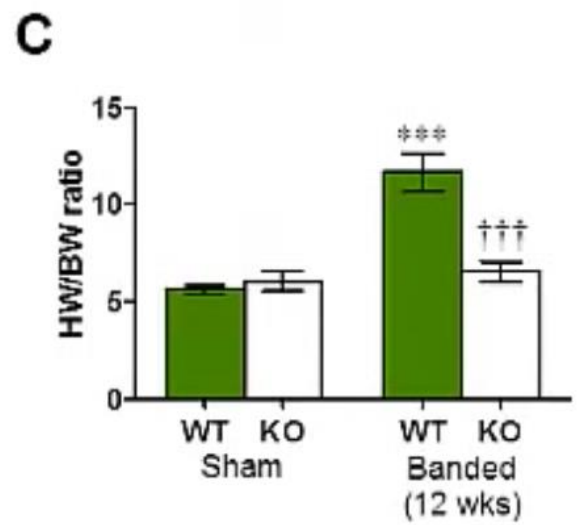
- Only use equations if absolutely necessary
- If you use equations
  - Slow down
  - Talk through step by step
  - Explain relevance

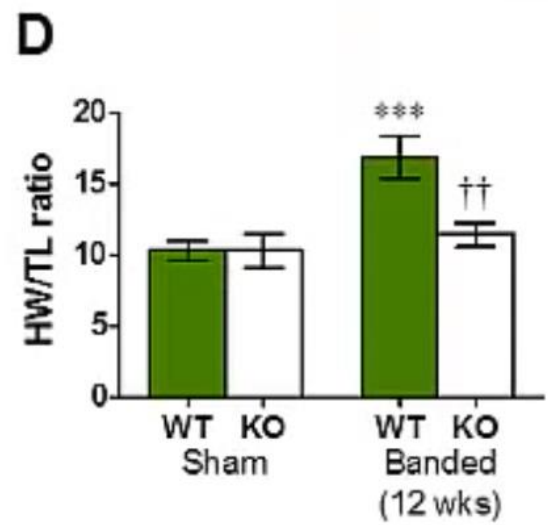


Data Presentation

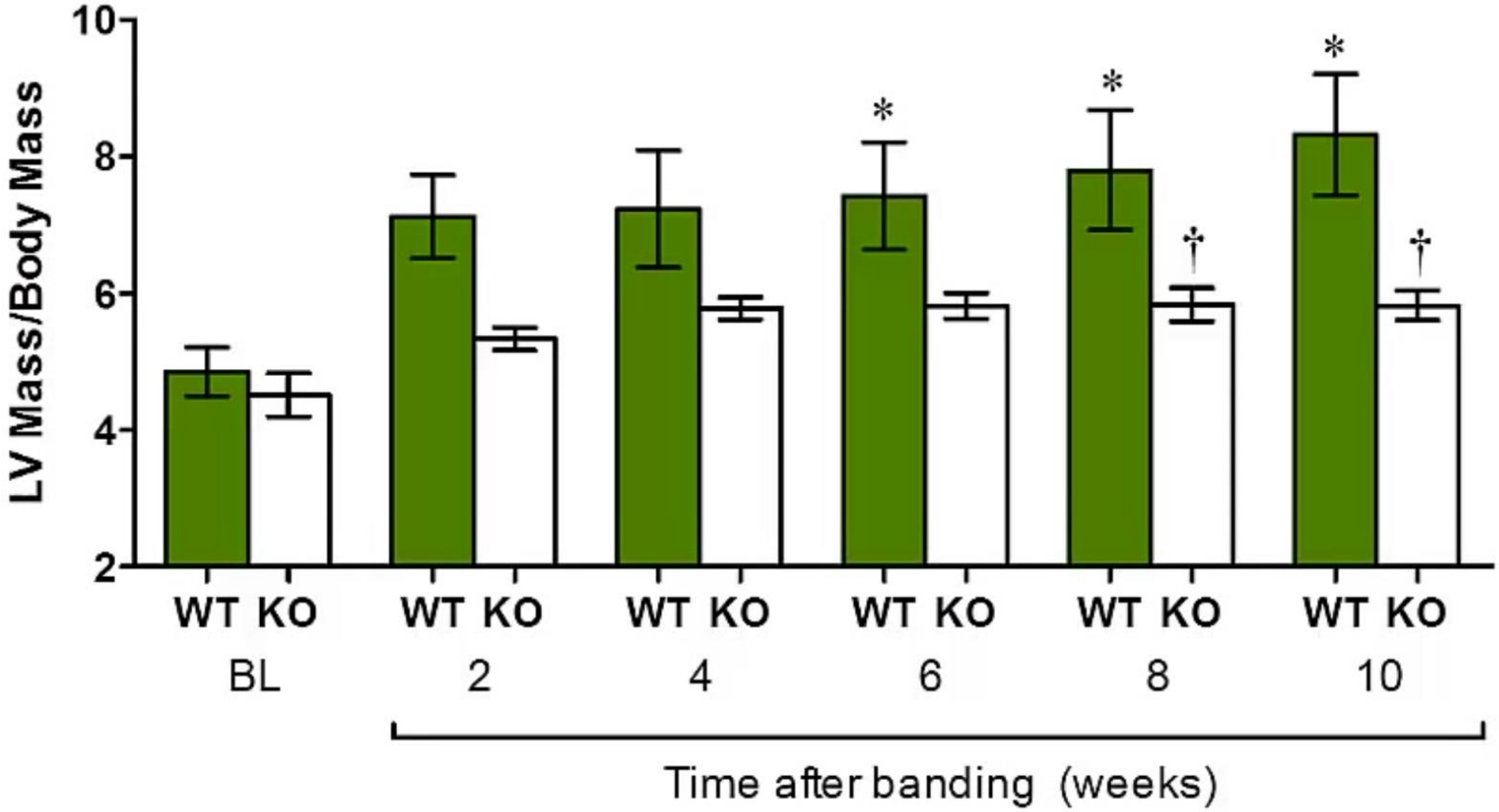
- Avoid putting too much data on one slide
- Spread themed graphs over multiple slides
- Keep colours and design simple:
  - limit shading patterns
  - Use contrasting colours &
  - avoid shadows and 3D
  - use larger than usual fonts







It is OK to make figures BIG



IF it makes complex data easier to understand

Video

IF you cant rely on them, don’t use them!

More advice

- Bring a copy of your slides if giving a PowerPoint presentation
- Fill the screen
- Don’t cover up portions of overheads
- Don’t argue with questioners
- Practice, practice, practice
  - Practice with slides
  - Find someone to listen
  - Record presentation
    - Video
    - Microsoft Producer

Control your feelings: never argue with an aggressive questioner

Conclusions

- Preparation is crucial
- Graphics enhance retention
- Be relaxed and (try to) keep audience attention
- Finish on time
- The more you practice, the better you will get

Answering questions…

- Be honest
  - if you do not know, you don't know
  - Do not try and avoid answering
- Be concise
  - don't 'waffle'
- Backup slides?
  - obvious questions
  - expanded info
  - methodologies

Andrew Cornelius

Scientific Presentations

How to (and how not to) Give an Effective Scientific Presentation

Top ten fears of Americans

1) Public Speaking
2) Heights
3) Insects
4) Financial Problems
5) Deep Water
6) Sickness
7) Death
8) Flying
9) Loneliness
10) Dogs

PLOS ONE | https://doi.org/10.1371/journal.pone.0211002 January 23, 2019

Genome constellations of 24 porcine rotavirus group A strains circulating on commercial Thai swine farms between 2011 and 2016

Supansa Tuanthap[1], Sompong Vongpunsawad[2], Supol Luengyosluechakul[3], Phanlert Sakkaew[4], Apiradee Theamboonlers[2], Alongkorn Amonsin[5]*, Yong Poovorawan[2]*

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Writing – review & editing: Supansa Tuanthap, Sompong Vongpunsawad, Apiradee Theam boonlers, Alongkorn Amonsin, Yong Poovorawan.