

Tips for Preparing and Giving an Effective Scientific Presentation using Powerpoint

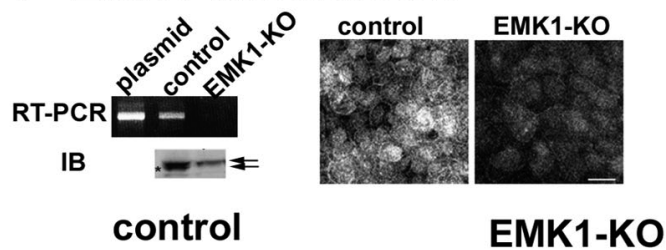
Based on :

- Foundation meeting by Susan McConnell at Stanford University
- Presentation prepared by Microbiology Dept at Colorado State University
- Personal experience

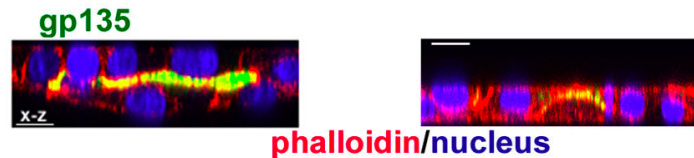
We may not be experts at public speaking,
but we are all experts at listening to talks

- Effective presentation style
- Appropriate background information
- Clear statement of hypothesis
- Clear data and methodology slides with
obvious "take home message"
- Effective summary and conclusion

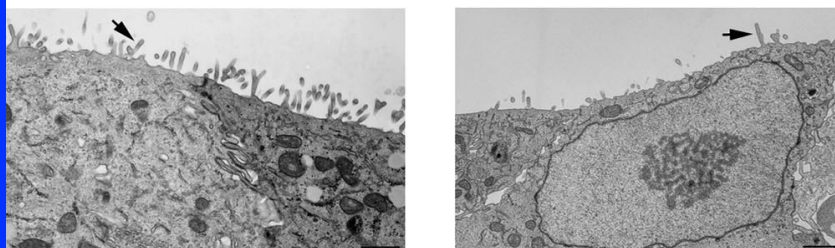
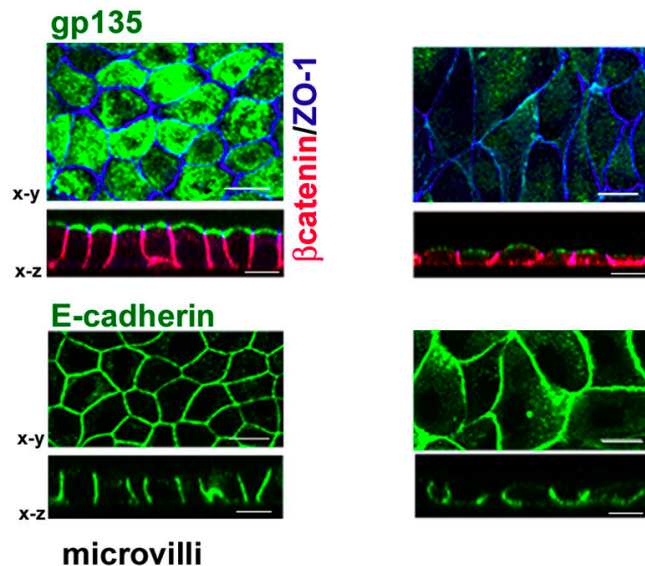
A EMK1-knockdown



B collagen overlay



C Ca-switch



Emk1 knockdown inhibits lumen formation in MDCK cells;

-RT-PCR: EMK1 is effectively knocked down in MDCK cells 24 hours after transfection with P-SUPER (control) or P-SUPER-siEMK1 plasmid; knockdown confirmed on the right with antibodies to EMK1.

- Collagen overlay assay: cells cultured 24 h on collagen I before being overlaid with additional collagen on the apical surface, analyzed 24 h later. Note the lack of lumen in EMK1-KO cultures.

- Ca switch: control or EMK1-KO cells were plated in low Ca medium 24 h upon transfection with pSUPER or pSUPER-KO. After 12 h, cultures were switched to normal medium for 24 h. Transmission EM of cells sectioned perpendicular to the substratum shows lack of microvilli in EMK1-KO cells.

Major errors

Poor choice of font style and size.

Poor choice of colors for background and text.

Too much data!!

Too many lines of text!!

No obvious conclusion.

Powerpoint basics:

1. What font to use

Use a Sans Serif font:

This font is Arial.

This font is Comic Sans.

This font is Papyrus.

Serif fonts take longer to read...

This font is Times New Roman.

This font is Courier.

This font is Didot.

Powerpoint basics:

1. What font to use

Type size should be 18 points or larger:

18 point

20 point

24 point

28 point

36 point

* References can be in 14 point font

Powerpoint basics:

1. What font to use

AVOID USING ALL CAPITAL LETTERS
BECAUSE IT'S MUCH HARDER TO READ!

Powerpoint basics:

2. Color

Dark letters against a light background work.

Dark letters against a light background are best for smaller rooms and for teaching.

Powerpoint basics:

2. Color

Light letters against a dark background
also work.

Many experts feel that a dark blue or
black background works best for talks in a
large room.

Powerpoint basics:

2. Color

Avoid red-green combinations because a large fraction of the human population is red-green colorblind.

Lots of people can't read this -
and even if they could, it makes your eyes hurt.

Antidotes for PowerPoint Poisoning

Choose Colors Carefully



Slide backgrounds, font sizes and colors



Powerpoint basics:

3. Layout

Keep the layout and style as consistent as possible.

Every slide should have a heading.

Try to limit text blocks to no more than two lines each.

Powerpoint basics:

3. Layout

The reason for limiting text blocks to two lines is that when the text block goes on and on forever, people in the audience are going to have to make a huge effort to read the text, which will preclude them from paying attention to what you are saying. Every time you lose their focus, your presentation suffers!

Powerpoint basics:

3. Layout

It is often effective to “unveil” a list point by point.

Do not overuse animations and do NOT have screeching sounds as text enters!

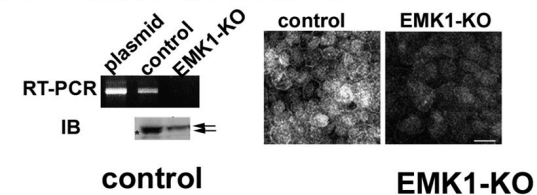
Powerpoint basics:

3. Layout

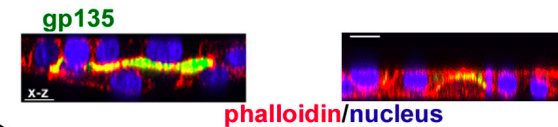
Do not cram too much
into a slide.

Try your best to include a
simple image on every slide.

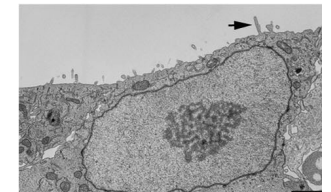
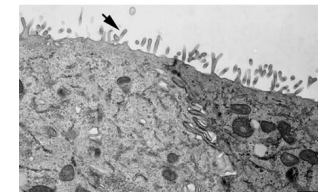
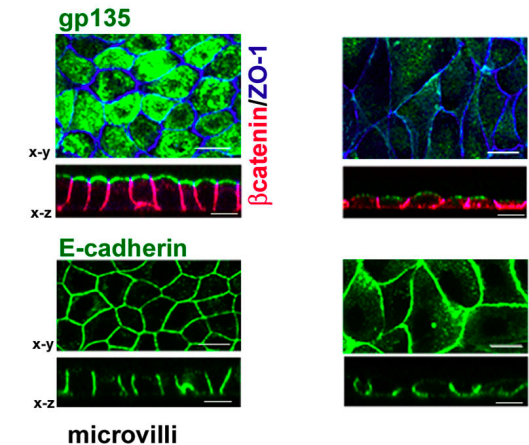
A EMK1-knockdown



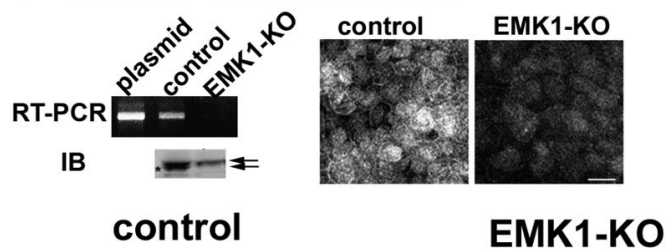
B collagen overlay



C Ca-switch



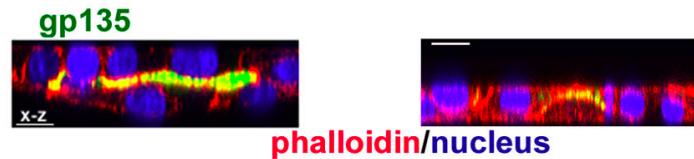
A EMK1-knockdown



Emk1 knockdown inhibits lumen formation in MDCK cells:

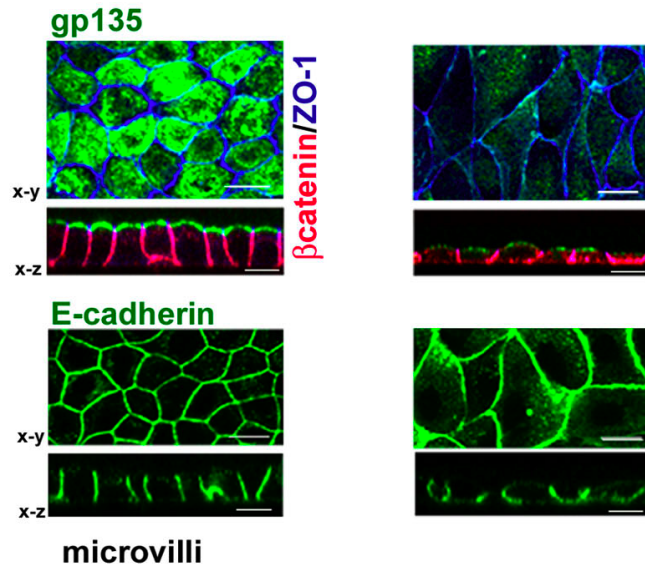
-RT-PCR: EMK1 is effectively knocked down in MDCK cells 24 hours after transfection with P-SUPER (control) or P-SUPER-siEMK1 plasmid; knockdown confirmed on the right with antibodies to EMK1.

B collagen overlay

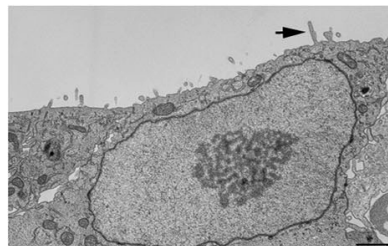
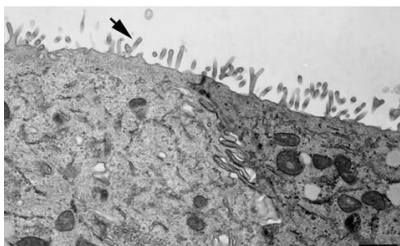


- Collagen overlay assay: cells cultured 24 h on collagen I before being overlaid with additional collagen on the apical surface, analyzed 24 h later. Note the lack of lumen in EMK1-KO cultures.

C Ca-switch

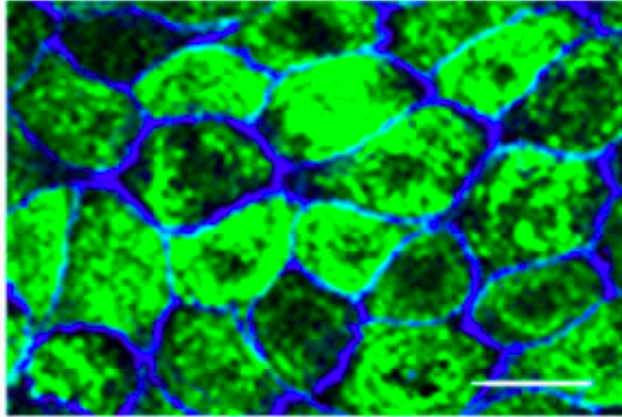


- Ca switch: control or EMK1-KO cells were plated in low Ca medium 24 h upon transfection with pSUPER or pSUPER-KO. After 12 h, cultures were switched to normal medium for 24 h. Transmission EM of cells sectioned perpendicular to the substratum shows lack of microvilli in EMK1-KO cells.



MDCK cells form a lumen following a change in extracellular $[Ca^{++}]$

MDCK cells

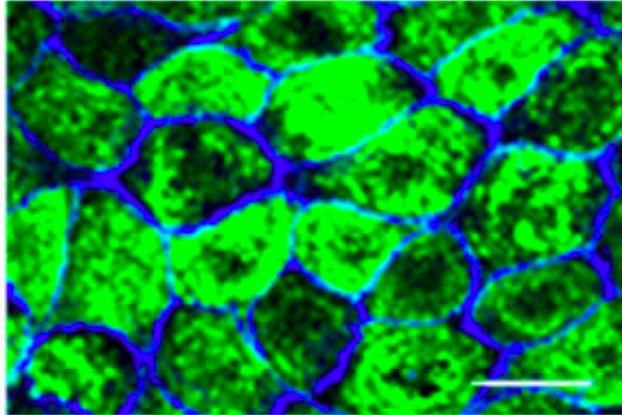


← Surface view from lumen

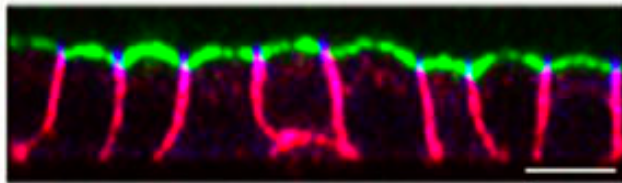
gp135	β -catenin	ZO-1
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MDCK cells form a lumen following a change in extracellular $[Ca^{++}]$

MDCK cells



← Surface view from lumen

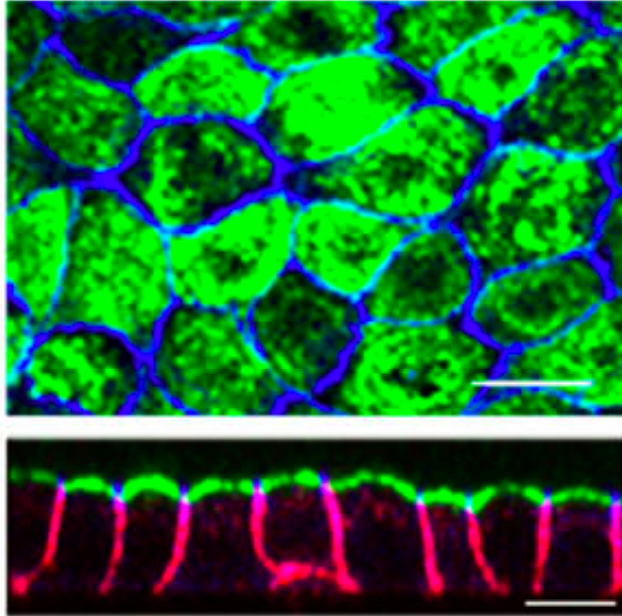


← Side view of lumen

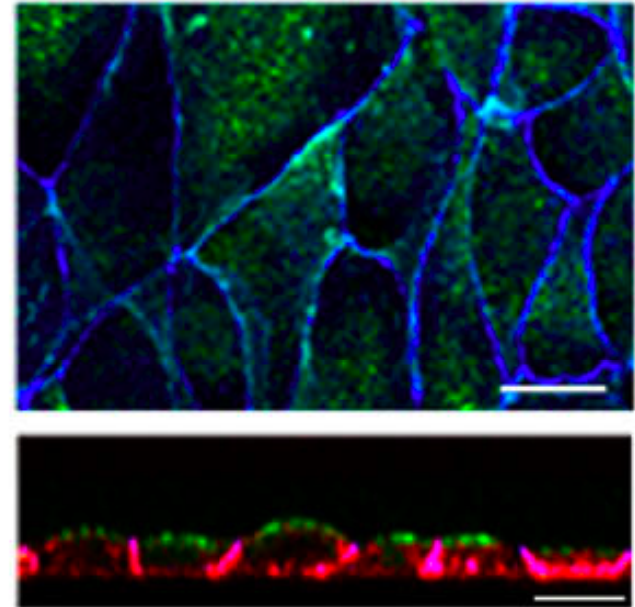
gp135	β -catenin	ZO-1
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Lumen formation is blocked in EMK1 knockdown cells

MDCK cells



EMK1 knockdown



gp135	β -catenin	ZO-1
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Tips for Preparing and Giving an Effective Scientific Presentation using Powerpoint

Powerpoint presentation:

- Font style and size

- Color choice for background and text

- Keep text blocks short and simple

- Do not overuse animations

- Keep figures as simple as possible

Do not use too many slides!

Presentation Hints

PowerPoint Presentations

- PowerPoint Poisoning:



Dilbert, August 16, 2000

Try not to use too many slides.
Often, less can be more effective!

There is more to giving a good talk than
showing good slides-
Presentation style is very important!

- Do not read your slides
- Do not use too many gimmicks (videos)
- Do not pace up and down but also don't stand rigid!
- Do not wave your pointer all over the slide
- Do not talk to the screen
- Do not use UMMH or AH HH to fill transitions

There is more to giving a good talk than
showing good slides-

Presentation style is very important!

- Do face the audience and make eye contact
- Do show enthusiasm and vary the tone of your voice
- Do practice beforehand
- Do ask your friends for feedback
- Do RELAX and ENJOY your presentation!