

HOW TO GIVE AN EFFECTIVE SCIENTIFIC PRESENTATION

Dr Ruth Freeman
Molecular Population Genetics
Trinity College
Dublin 2.

IMPORTANT SKILLS

Communicate scientific results
More and more as part of job interviews

FEARS

- Looking stupid
- Completely flopping
- Being “ripped apart” by the audience
- Boring the audience
- Forgetting what to say

WHERE DOES FEAR COME FROM

- Thinking you need to be perfect to succeed
- Trying to cover too much in a short presentation
- Trying to please everyone
- Trying to emulate other speakers rather than simply being yourself
- Thinking your audience will be as critical of your performance as you might be

BE PREPARED

-Know your subject matter
-Know your audience
-Practice

REMEMBER

- All speakers suffer from nerves
- Good speakers - practice and hard work
- Some adrenalin may help you to perform better
- PRACTICE (AND PREPARATION) MAKES PERFECT

If you fail to prepare, prepare to fail
Remember the nine o'clock news

Tell them what you are going to tell them
Tell them
Tell them what you have told them

SIX THINGS TO BEAR IN MIND

- The aim of the presentation
the Why
- The content
the What
- The audience
the Who
- The learning/teaching method
the How
- The environment
the When and Where

WHAT ARE YOUR GOALS?

NOT:

- to show an encyclopedic knowledge
- to demonstrate statistical and methodological skills

ARE:

- **Communication**
- Communicating the right impression

WHAT DO YOU WANT TO SAY?

“Take what you know and make it sound like it is all you need to know.”

- Only present a subset of your work
- Excess detail:
 - detracts from your presentation
 - may invite awkward questions
 - makes the audience switch off

Think about “Listener Energy”

STRUCTURE

- Opening
- Objective Explained
- 3 - 5 key points
- Bridge between points
- Summary
- Question time
- Close

KNOW YOUR AUDIENCE

- Who are the participants?
Level? Background? Mixed?
- What do they already know about the topic? (JARGON)
- Will they really be interested?
- How fast will they absorb the information?

- What are their prejudices, attitudes, beliefs?
- What do they want from you?

WHAT IS THE BEST WAY TO GET YOUR MESSAGE ACROSS?

- Hook
- Raise meaningful questions
- Use antagonists
- Give some sensible answers
- Humour?
- REPEAT YOUR MESSAGE

MAKE YOUR INFORMATION ACCESSIBLE

- Statistics/Numbers
- Use visual aids – next week
- Handouts – at the end
- Headlines – informative
- Write to your time limit – How?
- Practice out loud

BEFORE YOU START

- Be ready/on time
- Bring anything you might need
- Check your equipment
- Create a good first impressions-don't hide
- Take a few deep breaths and REMEMBER...

THE AUDIENCE WANTS YOU TO SUCCEED!!

BEGINNING

- Check the time - know when you have to end
- Introduce yourself
- Don't apologise
- Respect audience – coffee break/last talk
- Opening sentences ready
- Let people know what to expect
- What are the rules?

WHERE TO LOOK

- Face the audience – do not speak to your notes, your visual aids, or imaginary people.
- Check each slide
- Pause every now and then
- Maintain eye contact
- Gauge understanding – one thought, one face

SPEAKING

- Some people are naturally quiet - project voice
- too fast
- monotone, “ums” and “ahs”
- simple language where possible
- Positive language, no double negatives
- Try not to read word for word from the overheads
- But DO read or refer to your overheads

DO NOT

- Cling to furniture
- Clasp your hands in front of you or behind you
- Cross your arms
- Put your hands in your pockets
- Play with pointer, coins, keys, hair, jewellery, clothes
- Sway

DO

- Have your hands relaxed at your side
- Put down anything you are not using
- Use your hands for emphasis

MAXIMISE UNDERSTANDING

- Do not assume that your audience have absorbed everything from previous slides.
- Don't go off on a tangent or write new information on an overhead
- Do not speak on one topic while expecting people to read something else.

FINISHING UP

- Watch the time
- End clearly - prepare closing sentences? “So..em...that's all”

QUESTIONS

- Notify in advance
- Anticipate questions and criticisms
- Listen to the whole question
- Repeat a question to the audience
- Don't be afraid to pause
- Accept a good point or critique
- Hostile questions
- It is OK not to know the answer –find out
- Peripheral detail
- Keep answers brief
- Additional information

WHAT IF SOMETHING GOES VERY WRONG?

- Stay calm
- Practice means you know your material
- Think back to what you want to say
- Be prepared

PRACTICE, PRACTICE, PRACTICE (tape/video?)

RECAP

- Get the audience interested
- Keep structure and language simple
- Use appropriate visual aids
- Speak clearly to the audience
- Stick to your time limit
- Stay calm
- PRACTICE

REFERENCES

“Giving Professional Presentations in the Behavioural Sciences and Related Fields: a practical guide for the Novice, the Nervous and the Nonchalant.”

Michael J. Platow PSYCHOLOGY PRESS

“Scientists must speak: bringing presentations to life”

D. Eric Walters and Gale Clemenson Walters

ROUTLEDGE STUDY GUIDES

“Presentation Skills: the essential guide for students”

Patsy McCarthy & Caroline Hatcher SAGE PUBLICATIONS

How to Give a Bad Talk, David A. Patterson, University of California-Berkeley

Eric Clarke, Royal College of Surgeons in Ireland.