Tricks of the trade

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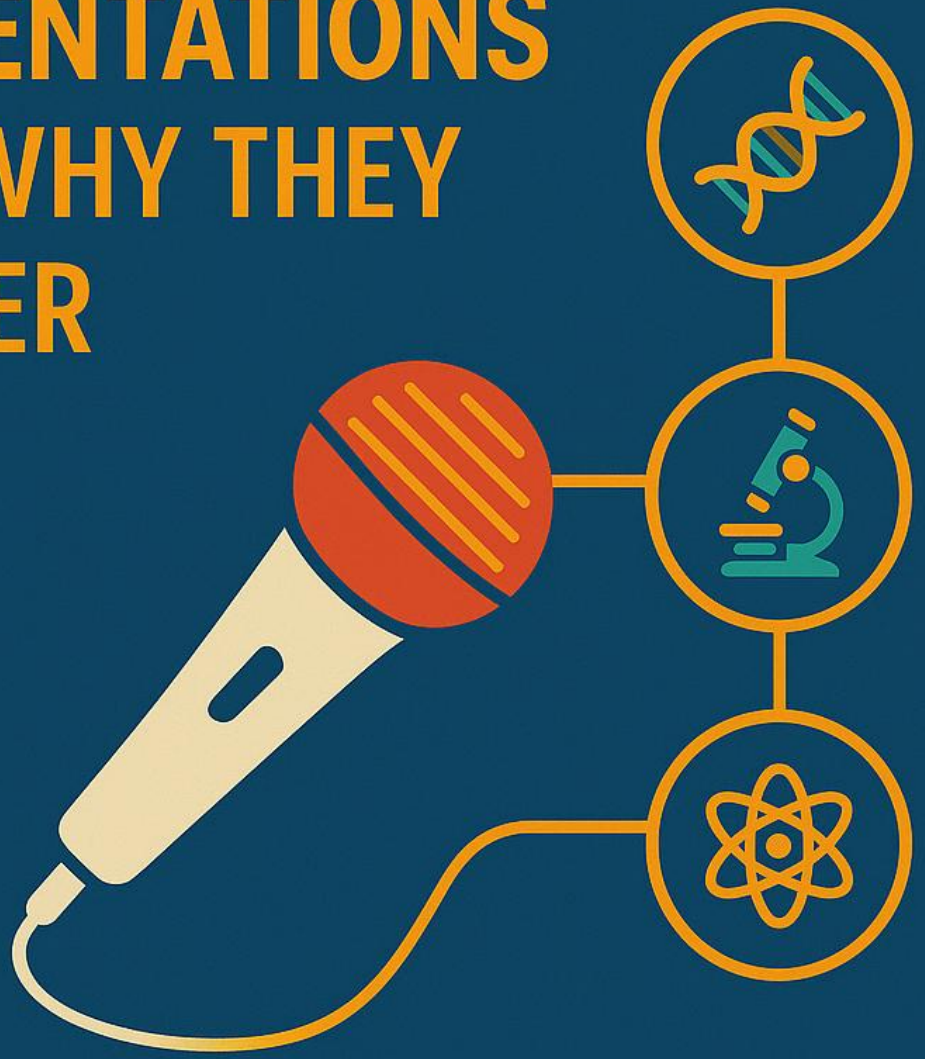
Caveat emptor

- Presentations
- Meetings
- Posters
- Connections
- Being seen (and heard)

There will be repetition in the advice given today, and some of it will be different. Some will work for you, some will not. You will find your own path.

PRESENTATIONS AND WHY THEY MATTER



- Why they Matter:
  - Impact of good communication on career, funding, and collaboration.
- Common Pitfalls:
  - Overloading slides, monotone delivery, jargon, and acronyms.

Presentations

Know your audience

- Tailor content:
  - General public vs. scientific peers, presenting your research vs. presenting yourself
- Cross-disciplinary audiences
  - Adjusting depth, tone, and vocabulary
- Excitement and engagement
  - Embrace your enthusiasm, let the audience get to know you

Presentations

Framework

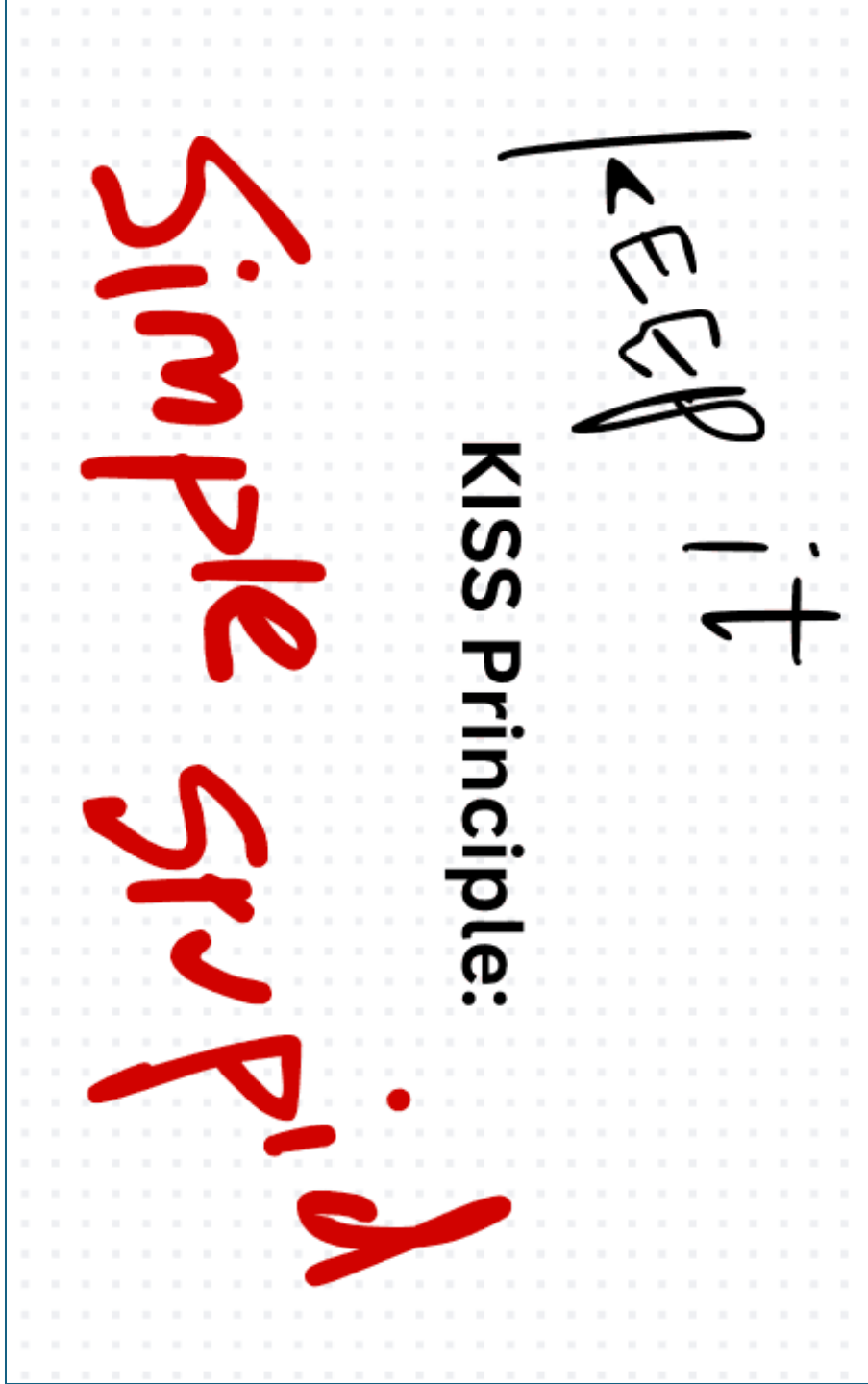
- Have an interesting title – ask a question (if you will answer it), tell a story.
- Introduction – What's the problem?
- Why did you study it?
- Methods – How did you study it?
- Results – What did you find?
- Discussion/Conclusion – Why does it matter?

- Tell a scientific story: have a clear arc, a central message, and memorable takeaways

Presentations

Design principles

- Clarity over complexity
  - Limit text (6x6 rule: 6 lines per slide, 6 words per line)
  - Don’t use 100 words when 10 would do
  - Don’t over-explain everything, clarify from questions later
- Use visuals: diagrams, graphs, photos – much better than paragraphs
- Consistency: Fonts, colors, alignment
- Emphasis: Highlight key results, avoid distracting animations



Presentations

Speaking technique

- Voice:
  - pace, tone, pauses
- Body Language:
  - eye contact, posture, hand gestures
- Presence:
  - confidence without arrogance
- Handling nerves:
  - preparation, breathing, mental rehearsal

Presentations

Data Visualization

- Presenting data clearly:
  - Avoid ‘chartjunk’
  - Indicate points of interest
- Presenting data efficiently
  - Avoid large areas of white space – enlarge important details if necessary.
- Use color thoughtfully (e.g., colorblind-friendly palettes)
- Label axes, define units, and indicate statistical significance
- Use scalebars

Presentations

Q&A Strategies

- Repeat the question:
  - to clarify, to give you time to think about it, and to let the rest of the audience hear if the questioner didn't have a microphone
- Be honest if you don't know:
  - Someone may have the answer in the audience or come up to you later and talk to you – this is how science advances
- Expect questions
- Use difficult questions as an opportunity to elaborate
- Be prepared to fill in with a question you wanted the results to answer, but that they have not yet

Presentations

Practice Makes Perfect

- Rehearsal techniques:
  - alone, with peers, record yourself
- Get feedback: what to ask your audience for
- Time yourself – respect the time limit

Presentations

Resources

- Books (e.g., “The Craft of Scientific Presentations” by Michael Alley)
- Videos (e.g., TED Talks with good science communication)
- Internal workshops or Toastmasters

- Bonus Interactive Ideas
- Look at “before and after” versions of slides
- Live critique or improvement of a sample talk or slide
- Crafting a one-minute summary of your presentation

Presentations

Special Formats

- Poster presentations
  - Know how to take someone through it in a few minutes
  - Use a photo of yourself, have a QR code link to a website
- Virtual talks: managing tech, engaging through a screen
  - Practice sharing a screen
  - Know how to mute and unmute
- Elevator pitches: short-format, high-impact summaries
  - Be able to define your research and results sucinctly

Meetings

Making the most of a meeting

- Smaller meetings are best
- Network – meet new people
- Everyone is just as nervous as you
- Don’t be afraid to talk to anyone
- Take a chance on a session
- Get contacts – follow up

Being Seen and Heard

Making Connections

- Do your homework – identify talks, sessions of interest, speakers etc.
- Introduce yourself to speakers (potential future employers) and poster presenters (future colleagues)
- Don’t be afraid to ask questions, even if it is for clarification or if you did not understand something
- Emphasis on don’t be afraid, everyone is either in your position or has been in your position before
- Go to organizational sessions in a meeting