Academic Communication
in (Astro)Physics

Lecture 12: Presenting Skills II

Conference Posters

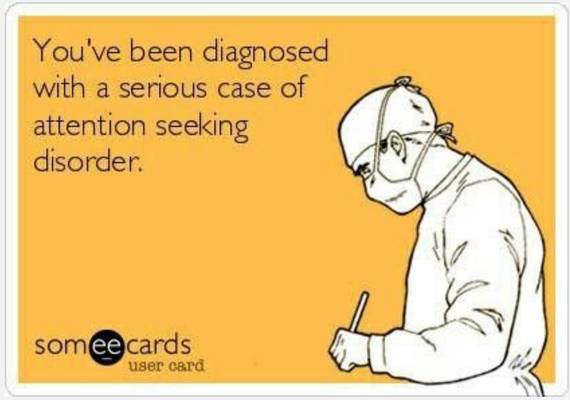
Conference Posters

Posters can be a great way to present your work!

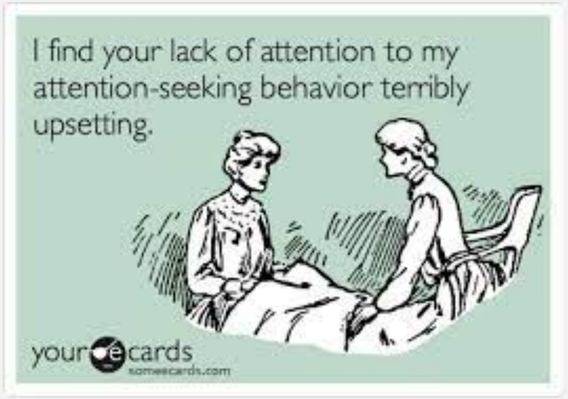
"One of the saddest sights at conferences is authors of posters standing forlornly and alone beside their work [...]"

David Lindsay

Goal: attract viewers



Unlike talks, the audience for posters is not captive – they need to catch the attention of the conference participant enough to stop and read, and hopefully, ask you questions!



Successful posters have to:

1) Catch the eye	2 seconds
2) Make a statement that arouses the scientific interest of a passing onlooker	10 seconds
3) Provide justification in the form of data	30-60 seconds
4) Stimulate the onlooker to find out more by talking to the author	no limit

Content of a poster (I)

Title

- 1-2 lines
- should briefly convey the interesting issue
- make it catchy to attract the passerby! But also informative.
- should be easy to read from far away

Abstract 

- do not include: waste of space, your poster is already an abstract of your research!

Introduction

- ~ 200 words
- target an intelligent person who is not in the field
- quickly (first sentence or two) get the viewer interested in the problem or question
- consider including a nice image or diagram that visually communicates some aspect of your research question (very effective!)
- use absolute minimum background information, definitions, acronyms (boring)
- cite relevant literature

(adapted from colinpurrington.com)

Content of a poster (II)

Data/ Methods

- ~200 words
- very brief description (visitor can always ask for details)
- use flow charts if possible
- mention statistical analyses if appropriate

Results

- ~200 words (not counting figure legends)
- provide engaging figures and legends that could stand on their own
- this is the largest section

Conclusions

- ~200 words
- remind the reader of the major result and quickly state if you answered the science question
- try to convince the visitor why the outcome is interesting (assume they skipped the Introduction)
- state the relevance of your findings to other published work
- add implications and future directions
- **this is what the viewer ultimately takes away from the poster**

(adapted from colinpurrington.com)

Content of a poster (III)

References

- keep them short: first author et al. (don't list all the authors); journal name abbreviations etc

Acknowledgements

- ~40 words

Further information

- ~20 words
- your contact details
- consider including a QR code linking to a URL of your webpage or PDF of manuscript

(adapted from colinpurrington.com)

A poster is just another way to tell your science story

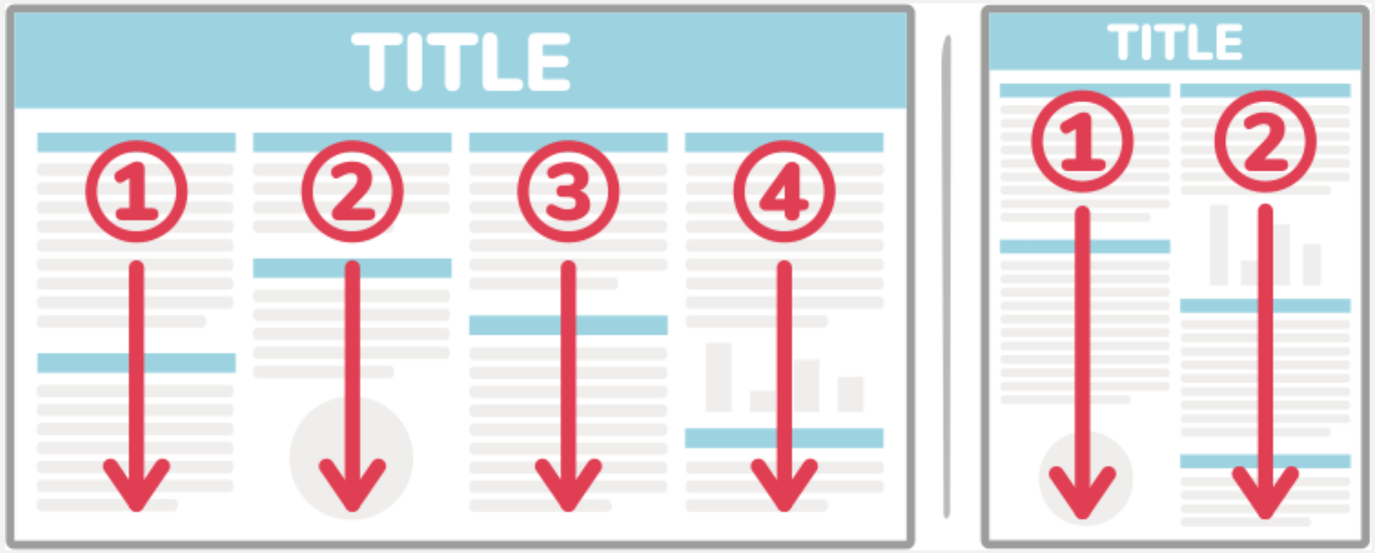
Use the poster to tell your audience a story.

- **Design your poster for people who don't know anything about your topic**
- **Make sure you can answer:**
  - what is my presentation about?
  - why is it interesting?
  - what do I hope to add? (i.e., state the science question!)
  - what methods did I use?
  - what did I find?
  - how do my findings answer the question?
- **Use interesting eye-catching figures and descriptive section headings**
- **Prioritize content with a visual hierarchy**

How to organize a poster

Divide into columns, with 1-3 sections per column.

Each column is read from top to bottom, and columns are read left to right.



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Size: usually A0

Orientation: landscape usually easier to read

– check with conference organizers for specific size and orientations that will fit in the poster boards.

DO. NOT. PUT. LOGOS. HERE.

Doing so crowds the title and visually distracts from important graphics. Put logo on your business card, not poster.

Title pitched at general audience that provides conclusion or at least hints at something interesting

Colin B. Purrington, **Department of Posterology,** Hudson University

DO NOT PUT LOGOS here, either.

Introduction

Three sentences max.

Persuade reader you have novel, interesting question(s) and hypothesis. Resist urge to use all the white space.

Materials and methods

Three sentences max.

If viewer truly wants to know gruesome details, they'll ask or email you. Sometimes adding a pic is good.

Results

Highlight your LARGE photographs, charts, maps, or in this central arena.

Don't include every graphic you've made that relates to project. Choose one. Or two. And separate graphics with plenty of white space.

If you have just one or two simple graphics, viewers will be drawn to explore them. If you have too many or they are too complicated, they will be repelled.

Annotate graphics with arrows and callout boxes so that viewer is **visually led** through how hypothesis is addressed. The goal is to enable viewers to understand the logic behind your conclusions without you needing to be there.

Keep font size of all text (even graph labels) as big or bigger than in rest of poster.

Conclusions

Explain why outcome is interesting. Don't assume it's obvious. Three sentences max.

Maybe include a sentence about what you plan to do next.

As for Introduction, don't feel like you need to fill the entire box.

I.e., if you retain a lot of white space you will attract more viewers. Seriously.

Literature cited

Author, J. 2012. Article title. Journal of Something 1:1-2.

Acknowledgments

Be brief.

Further information

Please **see** https://colinpurrington.com/tips/poster-design for more templates and tips. I'm at colinpurrington@gmail.com if you have a question or comment.

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Introduction

Three sentences max.

Persuade reader you have novel, interesting question(s) and hypothesis. Resist urge to use all the white space.

Materials and methods

Four sentences max.

If viewer truly wants to know gruesome details, they'll ask or email you.

Sometimes adding a pic is good.

Results

Highlight your LARGE photographs, charts, maps, or in this central arena.

Don't include every graphic you've made that relates to project. Choose one. Or two. And separate graphics with plenty of white space.

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Keep font size of all text (even graph labels) as big or bigger than in rest of poster.

Conclusions

Explain why outcome is interesting. Don't assume it's obvious. Three sentences max

Literature cited

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Introduction

Three sentences max.

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Resist urge to use all the white space.

Materials and methods

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Three sentences max.

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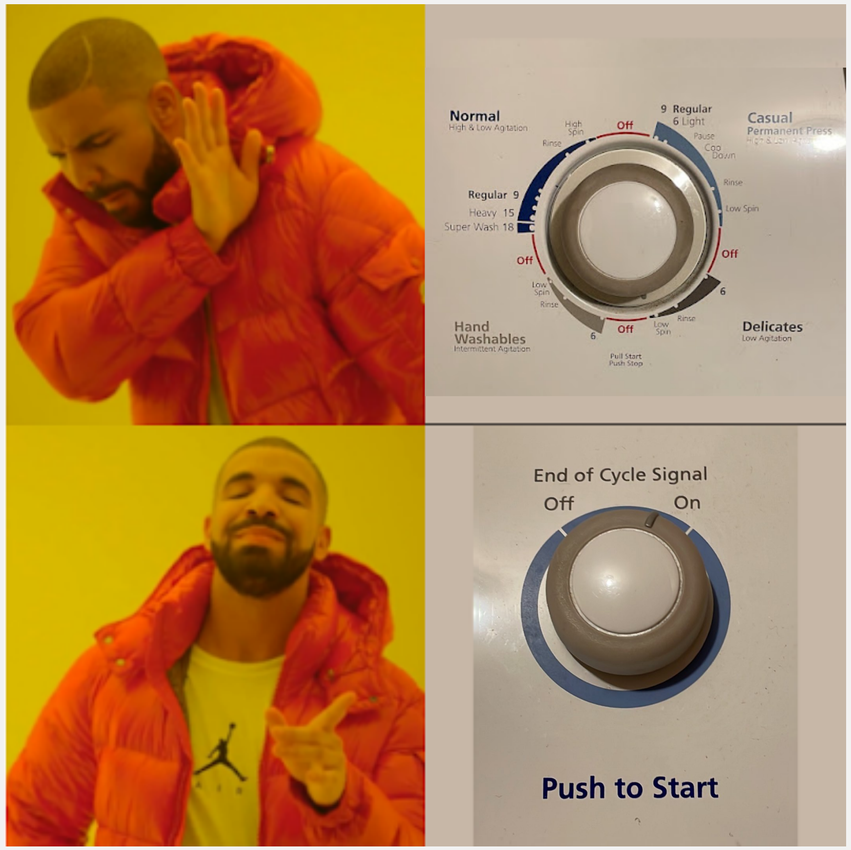
Some design “rules”



(1) Simple = good

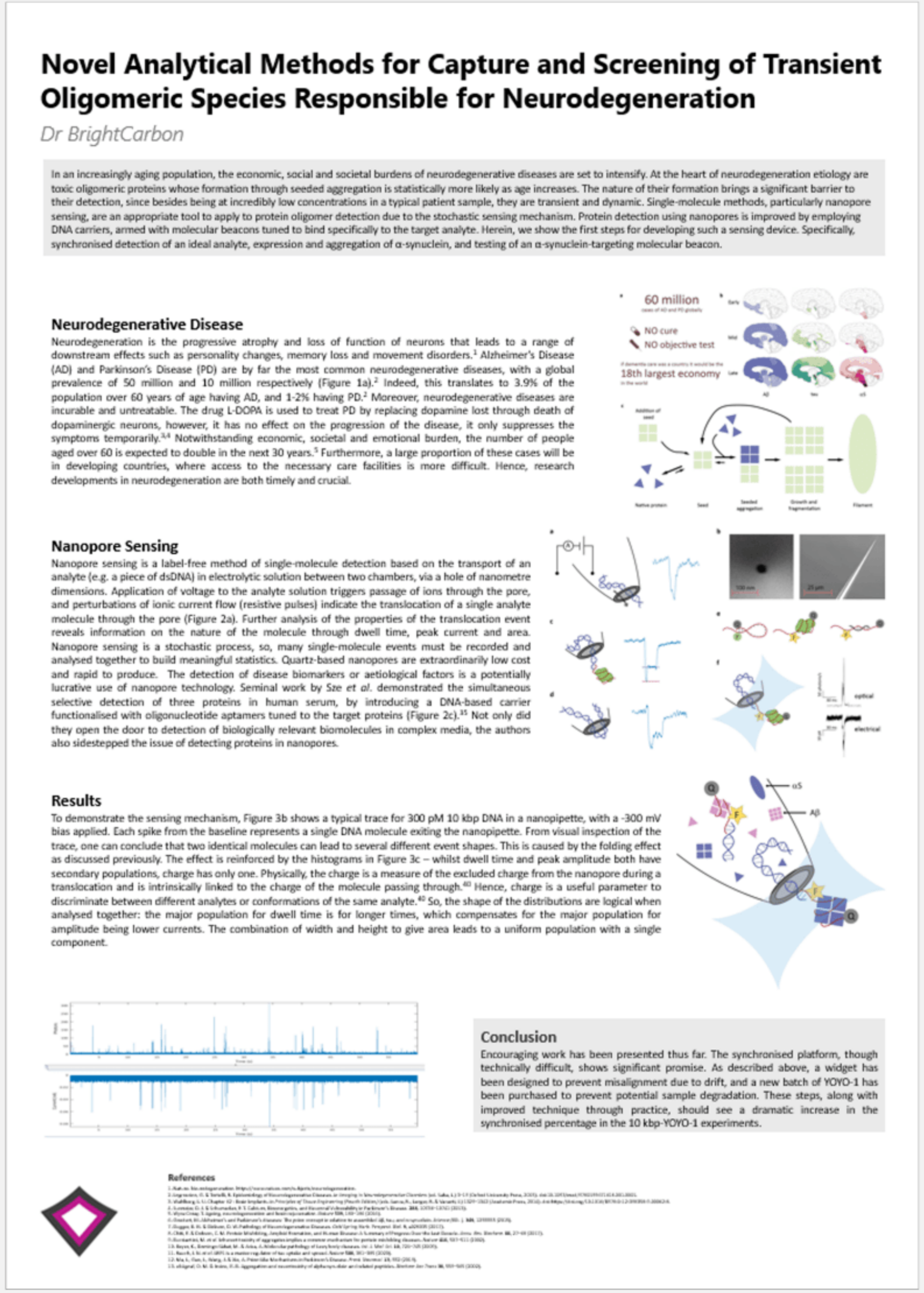
(2) Make important information stand out

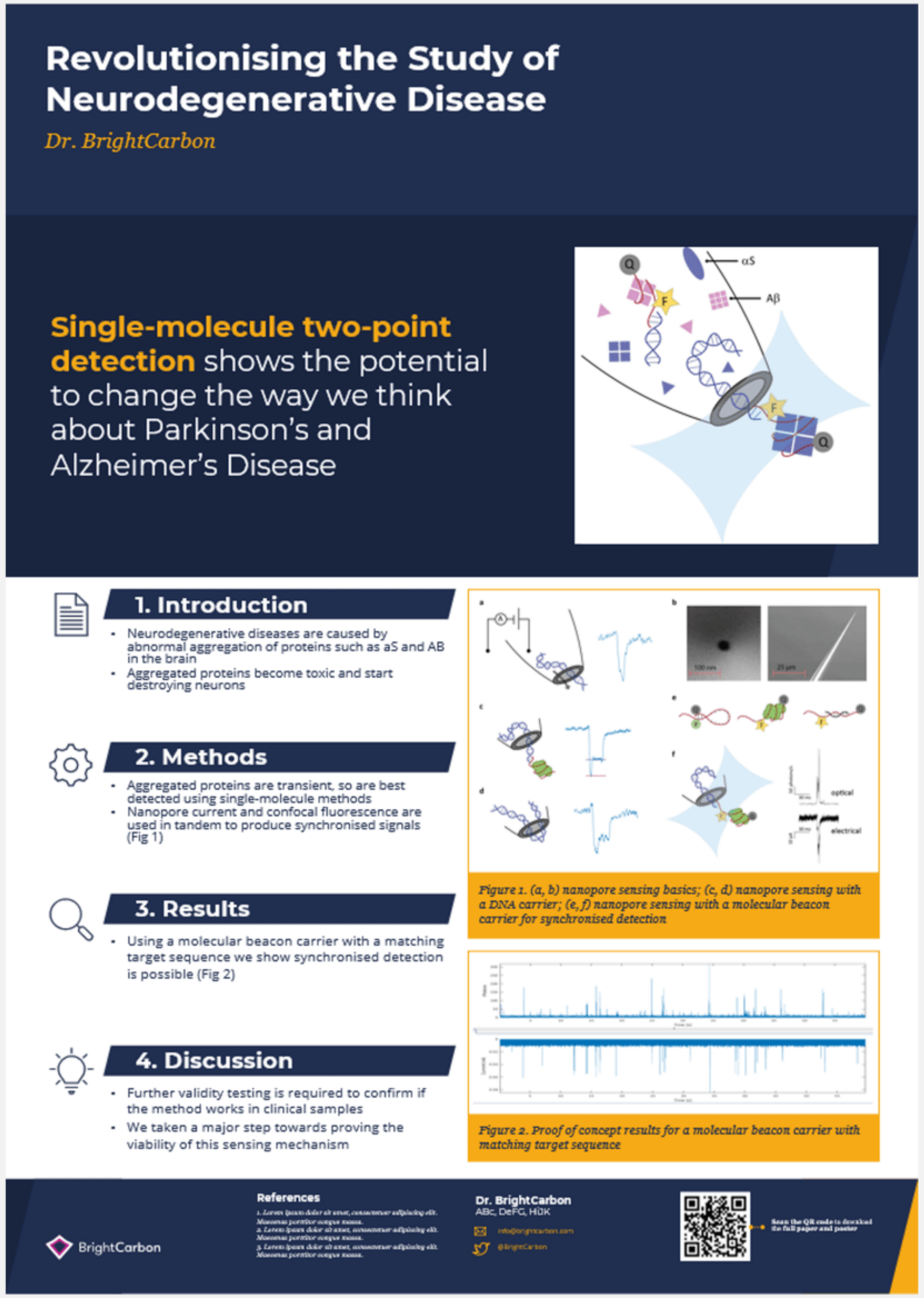
(3) Line things up

(4) Don’t overcrowd – aim for:

- 20% text
- 40% graphics
- 40% empty space

‘I can hardly read this poster’ → ‘Cool research, tell me more!’



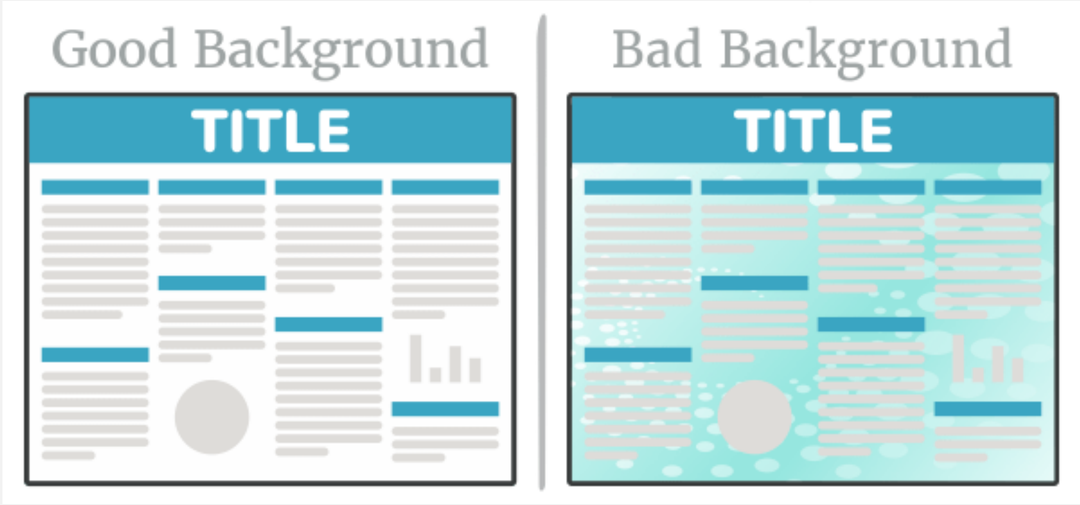


https://www.brightcarbon.com/blog/effective-academic-posters-powerpoint/

Design advice (I)

Background

- keep the background **non-distracting**
- use white or another light colour (or a subtle gradient)
- avoid photos, busy patterns, or distracting colours
- if you decide to use a dark colour, keep the text white



Design advice (II)

Title & heading styles

- these should **stand out**: your viewer should be able to easily identify each section at a quick glance
- use colours, boxes, bold text, and lots of white space to make them stand out

Design advice (III)

Fonts

- make sure they are **easy to read**; beyond that it's personal taste
- a good design principle: use one (serif) font for titles and headings and another (sans-serif) font for the rest of the text
- font must be large enough to read from a normal distance (1-2 meters)
- set line spacing between 1.25 and 1.5

Title/Headings: **Bree Serif**
Body Text: Open Sans

Title/Headings: **Montserrat**
Body Text: Domine

Title/Headings: **Amaranth**
Body Text: Titillium Web

Title/Headings: **Libre Baskerville**
Body Text: Montserrat

Title/Headings: **Quattrocento**
Body Text: Quattrocento Sans

Title/Headings: **Nunito**
Body Text: Open Sans

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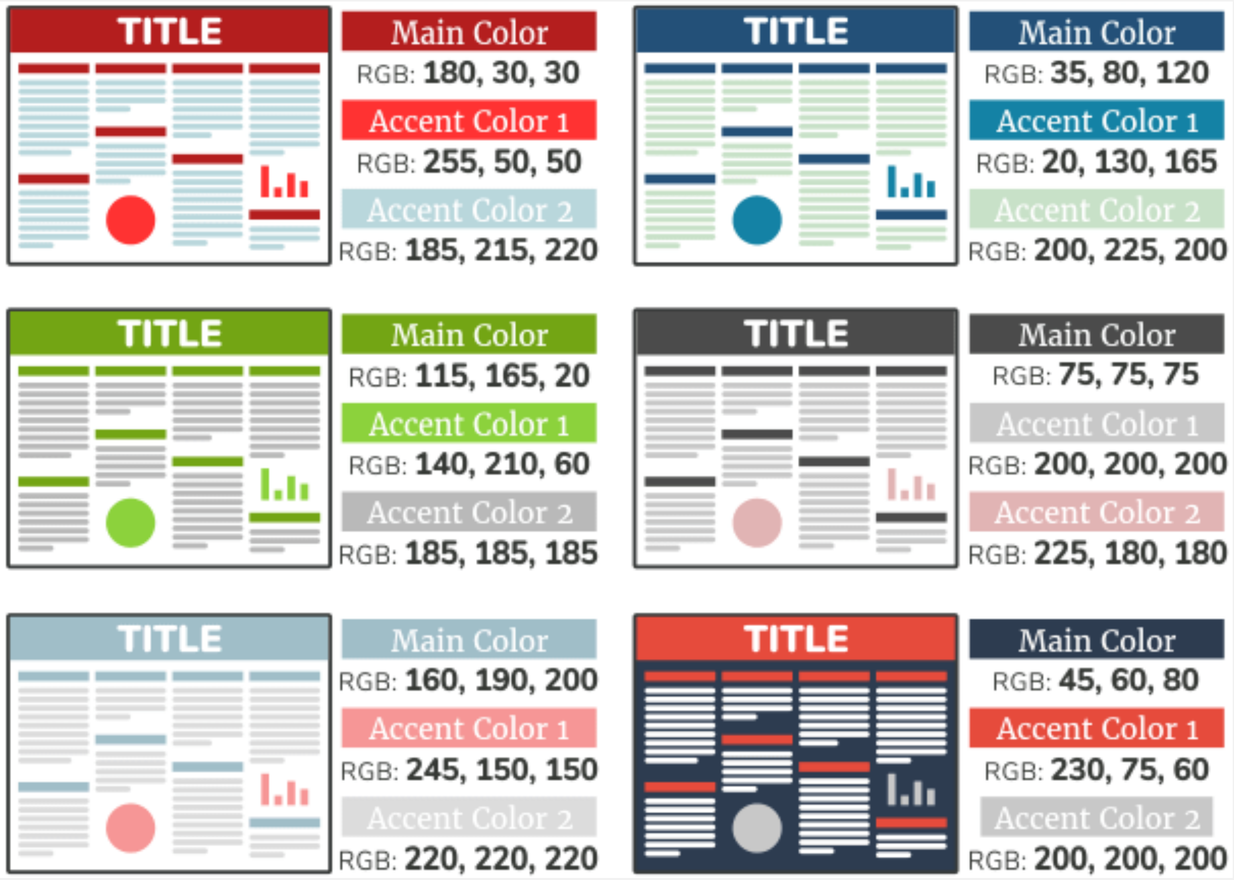
Design advice (IV)

Colours

- very important!
- should capture attention and highlight important information but should not be distracting
- a place to start: colours associated with your organization (ICRAR, UWA, ASTRO-3D branding)
- if you pick your own colours: keep them neutral with 1-2 bold colours used sparingly (e.g. one main color and 2 accent colours)
- consider matching to the colours in your plots/ images
- consider colourblind-friendly palettes



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Design advice (V)

Alignment & white space

- keep things well aligned for a professional look (use grids and alignment help in software)
- keep images similar sizes and make sure they are evenly distributed
- ensure that there is enough white space between each unique element, as well as around the border of the poster
- more empty space makes the information stand out more – don't drown key results among less important stuff!

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Images

Image resolution

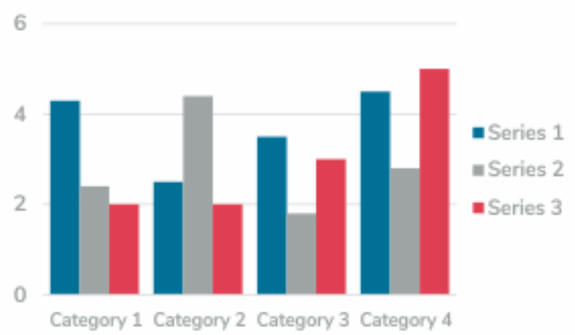
- make sure images don’t end up grainy or pixelated (check by zooming in to at least 100% to see how it will look close up)
- use vector graphics when possible (.eps instead of .jpg or .png)

Figures & Tables

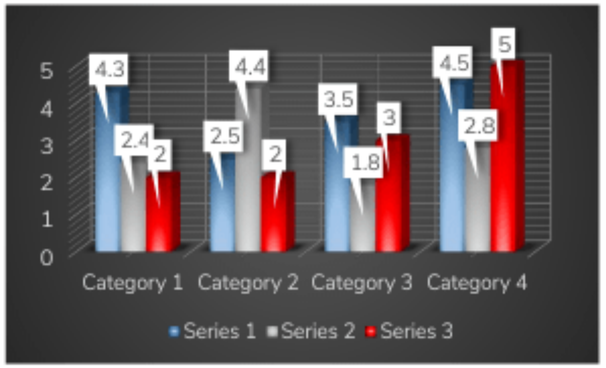
Figures & Tables

- remember what we discussed previous lectures
- remove clutter (borders, grid lines, background etc)
- use flat styles and solid colours
- highlight important data/values

Good Chart



Bad Chart



Good Table

Trial	Apple	Banana	Carrot
1	555	341	200
2	241	589	332
3	563	663	124
4	254	995	234

Bad Table

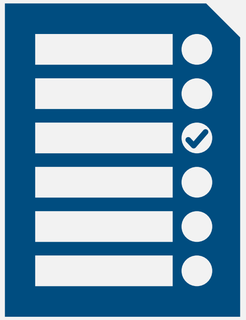
	Apple	Banana	Carrot
Trial 1	555	341	200
Trial 2	241	589	332
Trial 3	563	663	124
Trial 4	254	995	234

DOs and DON'Ts

- **DON'T** be too wordy (1000 words or less)
- **DON'T** make it too cramped, i.e., not enough white space around text boxes and figures
- **DO** keep the title within 2 lines
- **DO** format the title in sentence case
- **DON'T** add bullets to section headings (font size and style should be enough demarcate)
- **DO** keep width of text boxes to ~45-65 characters: optimal for reading lines quickly
- **DO** align text to the left (**DON'T** justify)
- **DON'T** vary the width of text boxes (visually distracting)
- **DO** use italics instead of underlining (underlining draws too much attention to a word)
- **DO** set line spacing manually to make sure spacing is uniform (critical if you have super- or sub-scripted text)
- **DO** set the tab amount manually (default usually too big); and never use spaces!
- **DO** avoid dark background for text boxes – dark text on white is easiest for most people to read (also, saves ink!)
- **DO** include figure titles and make them informative
- **DON'T** clutter your poster with logos: if you must include them, put them at the bottom and make them small. **DON'T** put them next to the title!

Final check before you print your poster

- [ ] Do my poster sections flow logically? Introduction -> Methods -> Results -> Conclusion
- [ ] Is all my text readable? Does it stand out against the background, is the font legible, size readable from a distance? Check for typos and spelling mistakes!
- [ ] Are all my graphics good quality? Zoom in to check if clear and crisp
- [ ] Are my data understandable? All figures and tables should be easy to understand in a few seconds
- [ ] Does the most important information stand out? When skimming, the most important information should catch the eye and be very obvious. It should only take a minute or so to grasp the content.



Make your poster stand out and more engaging

- Can you add a “sensory experience”? 3D images, hidden panels, objects, doodles, sounds, movies etc?
- Are you crafty? Make a home made poster, it is sure to get attention!
- Wear you poster! e.g., have a t-shirt printed

Whatever you do, don’t lose sight of the goal of making the science story interesting! But making it visually slick and appealing will attract viewers!

Prepare in advance and get lots of feedback! Idea: print a draft of your poster ~1 month in advance, hang it somewhere visible at ICRAR with a sign that asks for anonymous feedback (include post-it notes and pens). Don’t hang around; you want honest feedback!

Presenting your poster at the conference

- You'll be standing next to your poster at poster sessions, but it should be understandable without you there
- Advertise your poster on Twitter (use the conference hashtag)
- Do not refer to notes when presenting; practice presenting at home
- **Practice a 2-minute "elevator pitch"** – get people hooked on your science question
- **Act professional at all times:** people viewing your poster are likely future prospective employers/referees
- Attach a photo of yourself near or on your poster so people can find you more easily (note: photos where you're wearing sunnies or your face is small are useless for this!)
- If there's space, pin some manuscripts nearby for people to take
- Make shrunken versions (A4 size) of your poster to give as handouts
- Lure viewers: attach a clear plastic cup of candy to your poster with a note saying "please help yourself"
- **Thank your viewers for visiting.** If they stayed more than 4 minutes, you have succeeded; if they say "This is really interesting – I'll definitely come back later", you have failed.

Poster ‘sparkler’ session

You may be given the opportunity to present one slide about your poster during a poster sparkler session. Usually you’ll have only 1-2 minutes, very fast-paced!

- The slide: provide a PDF as usually the organizers will compile all the poster slides into a single presentation; avoid animations etc.
- You can just put up your poster so people will recognize it, but don’t go through it all.
- Or you can make a single slide highlighting your result (make it simple, just one or two plots)
- Practice what you will say and time yourself!
- Remember: the point is not to tell your entire story, only the highlights, so that people will want to visit your poster.

If you're stuck with design ideas, look for free templates online!

example: posternet.com has nice PowerPoint poster templates

(see also posterpresentation.com and much more on Google)

Scientific Poster PowerPoint Templates

Looking For Billboard Poster Templates?

Billboard Posters, also called *better posters* or *Posters 2.0*, are a new style of scientific poster that intends to simplify posters and make sharing information easier in a shorter amount of time. We have templates and tutorials to get you started.

BILLBOARD POSTER TEMPLATES

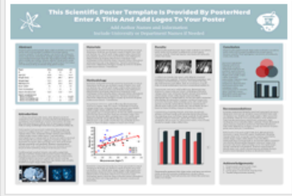
Here are some PowerPoint templates to get you started. Feel free to change the colors and layout as needed. These templates are within the PowerPoint page size limit of 56" and comes in several different aspect ratios, each of which can be printed in a number of sizes (as listed).

Persuading Sapphire

- 48 x 36 56x42 | 64x48
- 48 x 24 72x36 | 84x42 | 96x48
- 36 x 24 54x36 | 63x42 | 72x48
- 36 x 36 (square) 42x42 | 48x48
- 36 x 48 (vertical) 42x56 | 48x64

Pondering Peacock

- 48 x 36 56x42 | 64x48
- 48 x 24 72x36 | 84x42 | 96x48
- 36 x 24 54x36 | 63x42 | 72x48
- 36 x 36 (square) 42x42 | 48x48
- 36 x 48 (vertical) 42x56 | 48x64

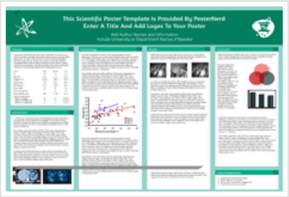


Assessing Slate

- 48 x 36 56x42 | 64x48
- 48 x 24 72x36 | 84x42 | 96x48
- 36 x 24 54x36 | 63x42 | 72x48
- 36 x 36 (square) 42x42 | 48x48
- 36 x 48 (vertical) 42x56 | 48x64

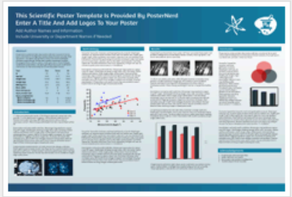
Hypothetical Ocean

- 48 x 36 56x42 | 64x48
- 48 x 24 72x36 | 84x42 | 96x48
- 36 x 24 54x36 | 63x42 | 72x48
- 36 x 36 (square) 42x42 | 48x48
- 36 x 48 (vertical) 42x56 | 48x64



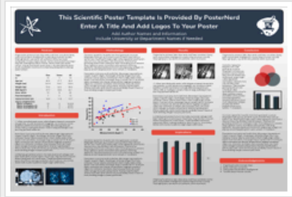
Philosophical Seafoam

- 48 x 36 56x42 | 64x48



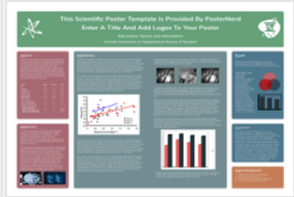
Conceptualizing Cobalt

- 48 x 36 56x42 | 64x48



Perceptual Pewter

- 48 x 36 56x42 | 64x48



Deliberating Watermelon

- 48 x 36 56x42 | 64x48