



Making and Presenting Scientific Posters

A Guide to Effective Poster Presentations

Prepared for ACLP

by the Oral Papers & Posters Subcommittee and Education Committee

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Psychiatrists Providing Collaborative Care Bridging Physical and Mental Health



Making and Presenting Scientific Posters

Prepared by the Oral Papers & Posters Subcommittee and the Education Committee

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Overview

- How to make a scientific poster
- The Poster Pitch



How to make a scientific poster



How to Make a Scientific Poster: Introduction

- There are many ways to organize a scientific poster. Three variations will be presented here. While strong and effective posters can take different forms, they all have common features and they avoid common pitfalls.

How to Make a Scientific Poster:

Introduction

- The ideal academic poster should be strong in **three areas**. It should be able to:
 - Maximize insight: the poster should disseminate the basic information (the "take home" point) without too much distraction or content that is overly time-consuming to read, interpret, and digest
 - Encourage selective engagement: offer opportunity for deep-dives into the material, based on the interest of the meeting-goer, and for stimulating conversations between poster presenters and meeting-goers
 - Be user-friendly for the poster presenter: the poster is not overly time-consuming to make; poster *facilitates* the presentation, without too many props or memorizing

How to Make a Scientific Poster:

Introduction

Regardless of how you organize your poster, follow these **key tips and principles** that are true for all effective posters:

- Ensure you know the poster requirements for the conference! Size, template requirements, upload requirements, when to hang posters
- Do NOT try to write a paper on your poster
 - Visual flow is important
 - Use bullet points as much as possible
 - You, the *poster presenter* – not the poster, itself – should be the source of much of the detailed content. Be able to speak in an informed way about the material that is summarized and referred to, on the poster; the ideal poster has limited content that sparks additional questions from the reader, which the poster presenter can then address
 - If helpful, bring notes or supplemental material to help you fill in the gaps of what is not included on the poster; have a way to offer this additional information to your reader if requested (as print-outs, or a link to material, such as a QR code – see below)
- The text should be legible at a distance (this slide is an example of how NOT to use text!)
- Use images in place of text when possible
- Keep the background light and neutral
- Use white spaces strategically as place for eye to rest and to minimize a cluttered appearance; can use images for this, too
- Make sure you **edit!**
- Be at your poster during the session, dressed appropriately, and bring business cards if you have them
- **Discuss choice of template with the rest of your team, including any mentors/supervisors before making a final decision** (save yourself some time up front!)

How to Make a Scientific Poster



NOT

For a guide to how NOT to make a scientific poster, you can review the following resource:

<https://colinpurrington.com/2012/02/example-of-bad-scientific-poster/>

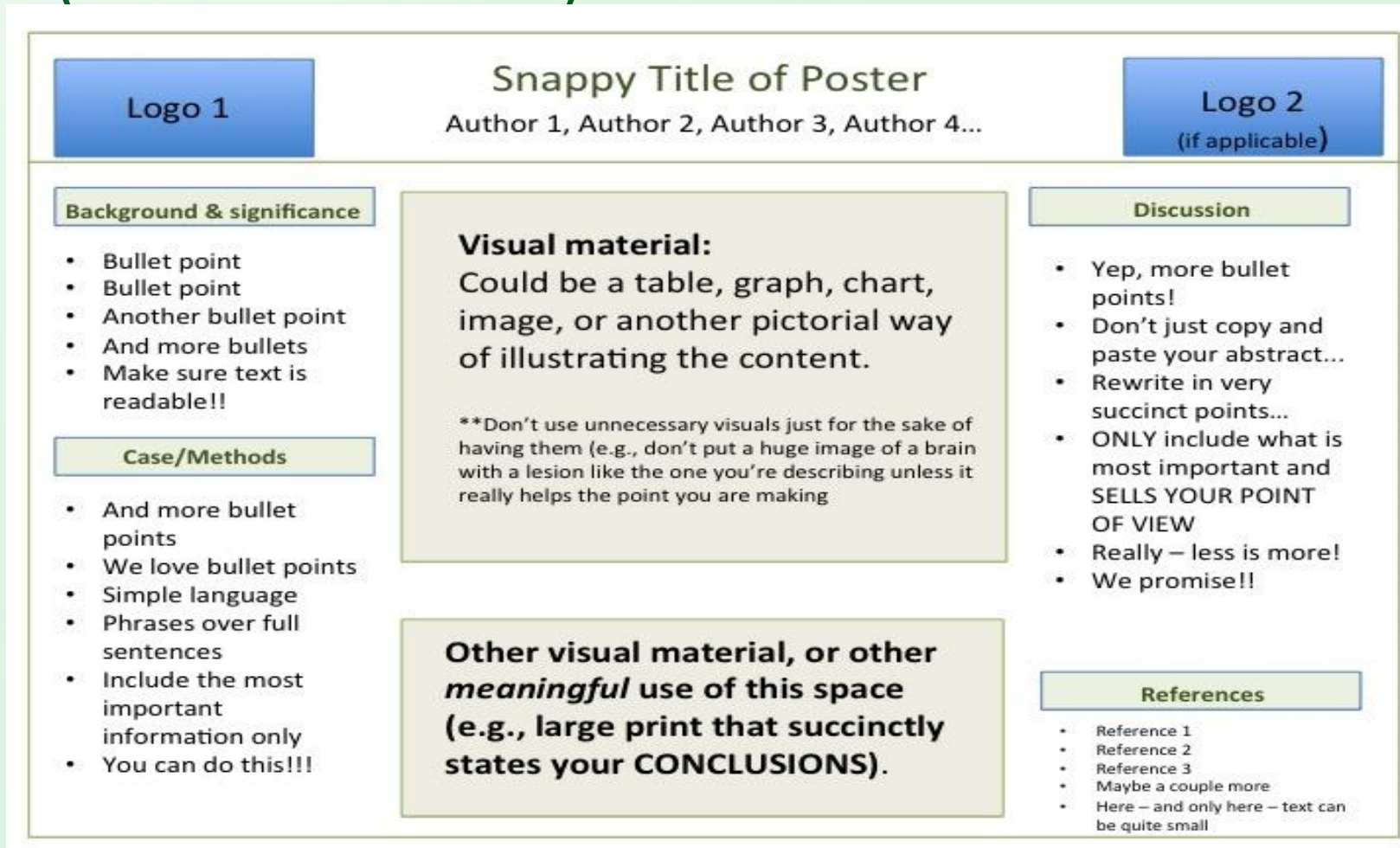
How to Make a Scientific Poster:

Format options

Option 1: Standard Format

- Main sections:
 - title, authors and institution(s)
 - introduction
 - methods (if relevant; for Case Reports, this section may instead include information about the Case)
 - results
 - discussion +/- conclusions (don't waste space with a conclusions section if you are only repeating what you have already written – include if you have formulated a useful summary that adds meaningfully to the communication of the poster)
 - acknowledgements (if relevant)
 - references
- Overview paper: Singh M K. Preparing and presenting effective abstracts and and posters in psychiatry. *Acad Psychiatry*. 2014 December; 38(6): 709–715.

How to Make a Scientific Poster: Option 1 (standard format)



- Example poster designed by Janna Gordon-Elliott, MD

How to Make a Scientific Poster:

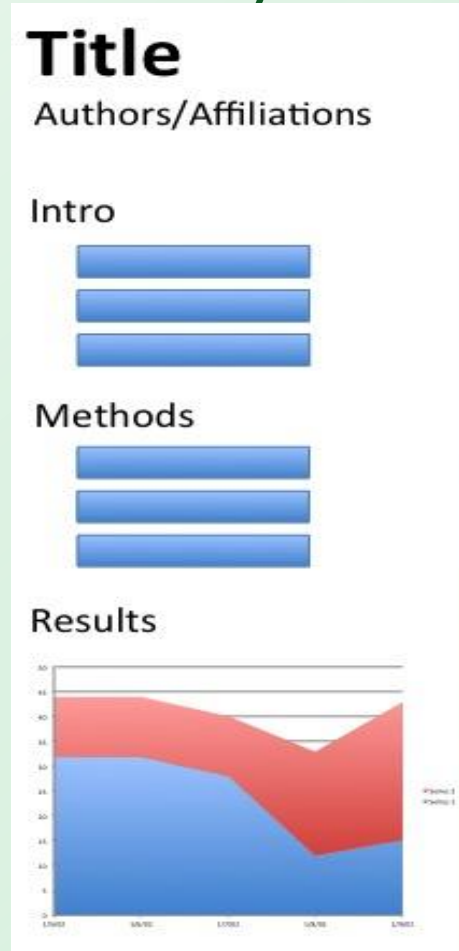
Format options

Option 2: Alternative Format, using *progressive disclosure*

- **Minimalism is the strength!**
- One main, central section which summarizes the results of the poster. This should be **ideally one sentence, in plain language, and be in the biggest font**. A link via QR code can provide a link to additional information if warranted.
- Side bar(s) on left and/or right displays title, authors, intro, methods, and results concisely.
- See article here: https://www.npr.org/sections/health-shots/2019/06/11/729314248/to-save-the-science-poster-researchers-want-to-kill-it-and-start-over?fbclid=IwAR35y75vM_caQn5X24ubDEiZHlCBApfMgnQLfqZd7pzBShRTztoaRLusKTo
- This method prioritizes what people NEED TO KNOW. Figure this part out first, and include this in your large text box. This is your “take home” message.
- Include what is NICE TO KNOW after that – if it meaningfully supports your “take home” message (this could include a brief summary of data, an important graph, etc.).
- Include easy access to a deeper dive, such as a QR code that links to the paper you have written, or (if no paper) a summary you can write to go into more detail about your project or case.

How to Make a Scientific Poster: Option 2 (alternative format)

- Figure by Sarah Slocum, MD
- There are various QR Code generators that can be found online. You can link to a cloud-based document through a URL, or to a PDF document. Many programs are free, but those programs that allow links to PDF documents may have subscription fees.



**Big, important,
single-sentence
with the take-
home message.**

QR
Code

How to Make a Scientific Poster:

Format options

Option 3: Hybrid Format





- While the poster example for the *Alternative Format* (Option 2) is an extreme version, a reasonable middle-ground option could be a template that involves the standard poster template on the **left** (i.e., background/significance, methods or case, results, discussion/conclusions, references), “take home” message and a QR code in the **middle**, and tables, figures and any additional data on the **right**.
- While some of the text and graphics may be small (thus, breaking the “principle” of being legible from a distance), the Alternative and Hybrid Formats allow for the attention of meeting-goers to be captured by your “take home” message as they walk by – in its big and bold central location; then, intrigued, they can come closer to look at the details and to ask you for more information, which you can provide.

How to Make a Scientific Poster: Option 3 (hybrid format)





- Figure designed by Mike Morrison, <https://www.insidehighered.com/news/2019/06/24/theres-movement-better-scientific-posters-are-they-really-better>

Title
Authors

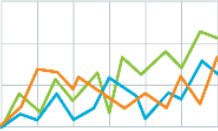
Intro




● 
● 
H1 
H2 

Methods




1. 
2. 
3. 
4. 

Results

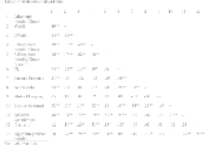


● 
● 
● 

Discussion
More research is needed, but...

● 
● 
● 

Extra Tables & Figures

Table 1: 







Table 2: 

Main finding goes here, translated into plain english. Emphasize the important words.



Take a picture to download the full paper





The Poster Pitch

How to use this “how to” guide

- Principles apply to **two presentation formats**
 - the in-person poster session pitch
 - a pre-recorded pitch available for meeting-goers to review prior to the meeting (uploaded for CLP on the meeting Microsite)
- Where appropriate, information specific to one **presentation format or the other** will be described

Basics

- Duration
- Goals
- Components

Basics:

Duration, Goals, Components

- Duration:

- The pitch should be short

- You are taking someone's attention from other things! How long can someone comfortably attend to you?

- Bottom line: aim for 1 minute (or less)

Basics:

Duration, Goals, Components

■ Goals:

- Create a memorable and positive impression
- Open the door to further conversation
- For the pre-recorded pitch, convince the meeting-goer to come see your poster in person!

Basics:

Duration, Goals, Components

■ Components:

- Your hook
- Introduction (yourself and your poster)
- The set-up: the *what* and the *why*
- Highlights: the *how* and the *what you found*
- For the in-person pitch, a discussion with meeting-goer if relevant

Components:

Your hook, Introduction, Set-up, Highlights

■ Your *hook*

- Grabs the viewers attention
- Start with one clear statement/ idea (as opposed to build up in presentations)
- This is best distilled to **one or two sentences** that you use to get people's attention and draw their interest
- Could be a question or a statement that introduces the topic and its importance

Components:

Your hook, Introduction, Set-up, Highlights

■ Introduction

- Your name
- Your position – i.e., resident/fellow/faculty/other
- Program
- Whom you worked with- faculty mentor/co-residents/medical students*
- What was your role in the project*
- Title of your poster

*Optional (may choose to omit to keep pitch brief)

Components:

Your hook, Introduction, Set-up, Highlights

■ The Set-up

- The *what*:

- What is the central **question, issue, or problem** prompting your project or case presentation

- The *why*:

- Why your issue is important
- How your project or case presentation fills a need or gap
- In a nutshell: why did you bother making into a poster, traveling to a meeting, and taking up the time of your audience??

Components:

Your hook, Introduction, Set-up, Highlights

■ Highlights

- *How* you did this or *how* did this happen
 - For projects: *briefly*, describe the process or protocol
 - For case discussions: *briefly*, describe the subject, the important occurrence, and the outcome
- *What*: take-home points
 - Most important, meaningful, or surprising **findings** and **conclusions**
 - What did you find?
 - Why do you think this happened?
 - How does this fit into the literature?
 - How does this contribute to what is known?
 - How should this contribute to practice and/or research in our field?

Keep it quick!

- Only say what is most important to say
- This brief introduction you're giving is just the start
 - More detail can be found by diving deeper into the poster, or by going to additional resources you offer (e.g., your references, or any additional materials, such as a hand-out, or a link through a QR code)
 - For the in-person pitch, you can facilitate the meeting-goer's deeper dive, based on interest, by pointing out select parts of your poster or by encouraging discussion and follow-up questions
 - For the pre-recorded pitch, the meeting-goer can think about questions or comments to discuss with you at the meeting

➤ Conceptual approach to organizing your presentation and prioritizing content

<i>How it all began</i>	<i>Introduction</i>	What prompted the work?	Who was involved?	What other work was being done at the time?	What is the relevance or need?
↓					
<i>What we did</i>	<i>Method</i>	Methods	Process	Analysis	Rigor
↓					
<i>What we found</i>	<i>Results</i>	Key findings	Successes, surprises, and failures		
↓					
<i>What it means</i>	<i>Discussion</i>	Did you get the answer you needed?	What do the findings mean for your field?	Are the findings transferable?	What will you do next?

Rowe, Nicholas (2017) Academic & Scientific Poster Presentation: A Modern Comprehensive Guide, Springer

Presentation skills: what's not on the poster


- For the in-person pitch
 - Stand in a way that doesn't obstruct your poster
 - Be welcoming, with non-verbal communication that is appropriate to the context
 - Speak loudly enough to be heard over background noise
 - It's ok to gesture toward relevant areas of your poster as you make your points
- For the pre-recorded pitch
 - Speak slowly and clearly enough to be understood
 - Consider writing a script or notes to follow

Practice makes perfect

- Try putting your 1 minute pitch in writing first to organize your thoughts
- Rehearse with peers/supervisors or in front of a mirror before delivering your in-person pitch, or before making your pre-recorded pitch
- If you rehearse with someone, ask for feedback about your content and presentation style

Keep the conversation going

- Questions and discussion (for the in-person pitch)
 - This is an important component of your presentation
 - Listen to the question or comment, ask for clarification if needed
 - Keep your response short, simple and concise
 - You may not have an answer to every question. Offer to send the meeting-goer an email once you have more information! (Remember to take down their email address!!!)
- Have an easy option for the meeting-goer to **contact you** later (e.g., email address or link on the poster for meeting-goer to write down or photograph, a business card, a hand-out, etc.)



An example (case report poster)

Example: your hook

Hook:

Have you ever had a case where the patient's decision-making capacity fluctuated and where inconsistent behaviors made it more difficult to assess the patient's intentions or wishes? I will use a case of fluctuating capacity in the setting of psychosis to discuss some of the complicated ethical dilemmas involved.

Example: the introduction

- *Hi, I'm __, a second- year resident at __ residency program*
- *I've worked under Dr. __ as my mentor who is the director of the consult service at __ hospital/program*
- *I worked with my co-resident/medical student on this poster**
- *My poster title is "...."*


*Optional (may choose to omit to keep pitch brief)

Example: the set-up

- What makes your poster important or noteworthy
 - *In C-L psychiatry, assessment of capacity to make medical decisions is a frequent request. The balancing of autonomy and beneficence can be especially complicated when the patient is experiencing psychotic symptoms.*
- How this presentation fills a need or gap
 - *I will use a case to illustrate some of the complicated ethical dilemmas faced in such situations*
 - *This discussion adds to a limited literature on this topic*

Example: the highlights

- What happened, how did this happen?
 - Summarize the case in just a few sentences
 - Essential information only
- Take-home points
 - Explain how this case specifically challenged our differentiation between stated versus demonstrated decision-making, and the balance between autonomy and beneficence
 - Offer useful suggestions for future practice (e.g, utilization of the Medical Ethics service, hospital administration, and Palliative Care service)



Now go make your posters and
practice your pitches!