

#### **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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ACADEMY OF CONSULTATION-LIAISON PSYCHIATRY 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 posterThe Poster Pitch

# How to make a scientific poster

Academy of Consultation-Liaison Psychiatry



#### 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 timeconsuming 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: 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)

Logo 1	Snappy Title of Poster Author 1, Author 2, Author 3, Author 4	Logo 2 (if applicable)
<ul> <li>Background &amp; significance</li> <li>Bullet point</li> <li>Bullet point</li> <li>Another bullet point</li> <li>And more bullets</li> <li>Make sure text is readable!!</li> <li>Case/Methods</li> <li>And more bullet points</li> <li>We love bullet points</li> <li>Simple language</li> <li>Phrases over full sentences</li> <li>Include the most important information only</li> <li>You can do this!!!</li> </ul>	Visual material: Could be a table, graph, chart, image, or another pictorial way of illustrating the content. **Don't use unnecessary visuals just for the sake of having them (e.g., don't put a huge image of a brain with a lesion like the one you're describing unless it really helps the point you are making	<ul> <li>Discussion</li> <li>Yep, more bullet points!</li> <li>Don't just copy and paste your abstract</li> <li>Rewrite in very succinct points</li> <li>ONLY include what is most important and SELLS YOUR POINT OF VIEW</li> <li>Really – less is more!</li> </ul>
	Other visual material, or other <i>meaningful</i> use of this space (e.g., large print that succinctly states your CONCLUSIONS).	We promise!!      References      Reference 1      Reference 2      Reference 3      Maybe a couple more      Here – and only here – text car     be quite small

Example poster designed by Janna Gordon-Elliott, MD

#### How to Make a Scientific Poster: Format options

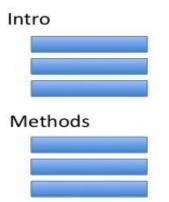
#### **Option 2: Alternative Format,** using *progressive disclosure*

- 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: <u>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=lwAR35y75vM\_caQn5X24ubDEiZHICBApfMgnQLfqZd7pzBShRTztoaRLusKTo</u>
- 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)

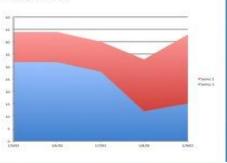
#### Title

Authors/Affiliations



Results

- Figure by Sarah Slocum, MD
- \*There are various QR Code generators that can be found online. You can link to a cloudbased 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 takehome message.

QR

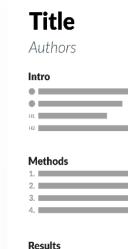
Code

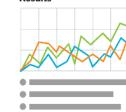
#### How to Make a Scientific Poster: Format options

#### **Option 3: Hybrid Format**

- While the poster example for the Alternative Format, above, is an extreme version, a reasonable 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)





Discussion

 Figure designed by Mike Morrison, https://www.insidehighered.com/n ews/2019/06/24/theresmovement-better-scientificposters-are-they-really-better Main finding goes here, translated into plain english. Emphasize the important words.



Take a picture to download the full paper

#### Extra Tables & Figures





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# The Poster Pitch

# How to use this "how to" guide

#### Principles apply to two presentation formats

- -the in-person poster session pitch
- a <u>pre-recorded pitch</u> 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



- 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 <u>pre-recorded pitch</u>, 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 <u>in-person pitch</u>, a discussion with meeting-goer if relevant

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

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)

#### 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??

#### 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
      - $\,\circ\,$  What did you find?
      - $\circ$  Why do you think this happened?
      - $\,\circ\,$  How does this fit into the literature?
      - $\,\circ\,$  How does this contribute to what is known?
      - $\,\circ\,$  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 <u>in-person pitch</u>, 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 <u>pre-recorded pitch</u>, 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

How it all began ↓	Introduction	What prompted the work?	Who was involved?	What other work was being done at the time?	What is the relevance or need?
What we did ↓	Method	Methods	Process	Analysis	Rigor
What we found	Results	Key findings	Successes, surprises, and failures		
What it means	Discussion	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 <u>in-person pitch</u>

- 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 <u>in-person pitch</u>, or before making your <u>pre-recorded</u> <u>pitch</u>
- If you rehearse with someone, ask for feedback about your content and presentation style

#### Keep the conversation going

- Questions and discussion (for the <u>in-person pitch</u>)
  - 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 meetinggoer 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)

