how to create a winning poster

So you want to give a poster at a meeting?  Want a few tips?  Read on to learn how to create a winning poster. This is a hands-on workshop so bring your laptop. We’ve got templates.

Before you begin, think about the bigger picture and decide *why* you want to present a poster.  Are you presenting published data to advertise your science?  Are you presenting unpublished data to lure collaborations your way?  Or to simply get ideas and feedback on your project?  Or are you presenting a poster to simply network with other scientists?  There are many reasons to present a poster.  Design a poster to meet your goals.

To help you on your way, our lab has created a repository of templates and past posters which you may use as a guide. This should save you some time. However, feel free to explore your own style, develop a new format and new template—please deposit them in the respective locations within this directory.

It is critical that you recognize that a poster is just as important as a publication or a talk.  It is just a different means to communicate your science. Like any publication or talk, you want to create a poster that STANDS OUT in a crowd.  These tips will help you accomplish just that... but first, a few bullet-points:

* **The goal of the poster is to assist you in briefly presenting you and your research topic.**Note that a poster is not an article and should not be “written” with lots of text. A poster should make your topic *alive*. It can provide you with images, graphs, definitions, results, etc. when *you* explain the topic. It’s like an elevator pitch with help (meeting the CEO in the elevator, you have ten seconds to explain what you work on and why it is important).
* **Focus on the central message.**As you do not have the space and time to describe your project fully, focus on the really new aspect, the central message you want to convey. If you are uncomfortable with simplifying the message too much, refer to an article available on request for more information. And **never** add too much text. Keep it short, otherwise people will walk by.
* **Make it incredible, remarkable.**Your poster will likely be one of many posters, so think of something that makes your poster remarkable.  This is accomplishable through the both the message content and the design. Be creative.
* **Design matters.**While most journals foster austere design, a poster offers you more latitude to make your work appealing to the eye. Think how you can make the topic accessible. Be bold in your design.  And create your own style that is consistent with your work, see attached for an example of a stylesheet.  Over the years, you can develop your own, drawing from it for your publications, grants, posters, talks.

* **Convey a professional image.**Take care that you come across as professional. Meeting you for the first time on a conference, a fellow scientist has little to evaluate whether your work is genuine or not. Be professional to help create that initial trust.
* **Facilitate conversation: at the poster.**When standing before the poster a fellow scientist should easily get more information — from you. This means that you should be easily recognizable. For example, put photos of the authors on the poster (a current photo!) and highlight who will be at the conference in front of the poster. Smile when someone looks at your poster, let them read it and once they have finished, find out who they are and why they were interested in the topic. If appropriate, delay your formal presentation to gather more visitors. This is a great way to generate crowd electricity and at the same time, save your voice. Posters are *bad for in-depth information*, but great for making contact and networking.  So shake some hands and gather names. Feel free to provide preprints and mini-poster printouts at your poster-- it may help generate a memorable impression.
* **Facilitate conversation: during the conference.**If the posters are available for some time, make sure that there is not only a photo of you, but also some ways to contact you. For example, your Twitter name or your email address. Write that you would love to talk about the topic during the conference and use this opportunity if someone contacts you. Even if nobody does this, you signal that you are open for discussion.
* **Facilitate conversation: after the conference.**Contact people who wanted more information after the conference and inquire about their lines of research. Even if they themselves might offer no contribution, if they know about your project they can mention it to their colleagues.

s u c c e s s f u l    d e s i g n

Regarding poster preparation, the best advice to give is: *prepare weeks to months in advance*.  Yes, this requires time management.  But if you recognize that a poster is an extension of you and your science, make sure it reflects the quality that you want to represent. Create a draft, get advice from others, practice presenting it.  It takes time and you probably want to avoid the stress of looking for a printer at the last minute.

|  |  |  |
| --- | --- | --- |
| SHORTEN YOUR TEXT LINESLong lines of text are more difficult to read, which is why magazines and newspapers always break up their text into narrower columns. If your poster has a landscape orientation, consider breaking your text into four columns. the key is to use very few words.  Leave the text for the publication.CONSIDER YOUR FONTChoose a professional font, preferably sans-serif. And to help keep your design clean, try to maintain the same font or font family throughout the poster.DON’T PUT CONCLUSIONS ON THE FLOORIf you feel daring, start the body of the poster with your conclusion.  Otherwise just place it front and center.  But dont hide it in the bottom corner of your poster.BIGGER IS BETTER“Large fonts are a huge success.  It brings in your audience. A font size of 85pt for the title, 36–44 for the headers, and 24–34 for the body text. MAINTAIN HARMONY WITH YOUR COLOR PALETTEChoose a color palette that reflects your style.  One of the biggest design mistakes is to combine colors haphazardly.  Instead, work within a harmonious color scheme, perhaps using preset palettes available in your design software. |   | TITLE WITH A MESSAGETitles are the best way to quickly tell readers what they are supposed to take away from your data. Choose a sexy mysterious title or something catchy, but DON'T use more than one line of text and certainly DON'T include complicated jargon.MAKE YOUR FINDINGS OBVIOUSHighlight the peak, trough, or other comparison of interest with an arrow containing the value of that data point. It’s better than making a reader work out the value from the axes.INCLUDE THE METHODOur lab often develops novel technologies and uses cutting-edge techniques that may not be widely available or known. Describe the methods in broad brushstrokes and use references to help the reader learn more.TEMPORARILY DUMP YOUR TEXTA good way to test to see whether your graphics are serving their intended purpose. If you remove all the text, leaving the graphics, the poster should still be pretty good. Many scientists are lazy and don’t read. The images should tell the whole story. |

**SOFTWARE**

Popular software include Adobe Illustrator, Adobe InDesign, and Microsfot Powerpoint.  Lesser known free software includes [Inkscape](https://inkscape.org/en/), [Affinity](https://affinity.serif.com/en-gb/), [OpenOfficeDraw](http://www.openoffice.org/product/draw.html%22%20%5Ct%20%22_blank), and [GIMP](https://www.gimp.org/). And [R](http://www.r-project.org/) makes wonderful heatmaps, plots, graphs, etc and is probably worth your time learning the fundamentals. All software takes a bit of time to learn and you should consider it an investment. In any case, it can take a lot of time to create a winning poster so plan ahead and use online resources (see below).

**WHERE TO LEARN MORE**

There are a large volume of useful links, certainly too many to list here.  A few helpful ones include:

* [**Designing Presentation & Research Posters with Illustrator**](https://guides.lib.umich.edu/poster). A helpful pointer page from the U of Michigan.
* [**Poster and Presentation Resources.**](https://gradschool.unc.edu/academics/resources/postertips.html)A mammoth collection of links, some of which were used to create this page.
* [**Adobe Stock.**](https://stock.adobe.com/)  A useful resource for vector graphics. Be aware of your [rights](https://stock.adobe.com/license-terms) to use the stock.
* [**Overall structure and elements of a winning poster**](https://www.youtube.com/watch?v=EL5YwkiqBho)**.** Best practices video by Sam Hertig. His winning poster is attached as an example.
* [**Understand how to apply color.**](https://www.youtube.com/watch?v=VfLuAWW7ekQ)A short video to help you understand how to use [color harmonies and palettes](https://earthobservatory.nasa.gov/blogs/elegantfigures/2013/08/05/subtleties-of-color-part-1-of-6/) in Illustrator.
* [**Communicating complex science intuitively.**](https://www.ncbi.nlm.nih.gov/pubmed/?term=Krzywinski+martin)  [Martin Krzywinski](http://mkweb.bcgsc.ca/brewer/) and colleagues have published a [series](http://blogs.nature.com/methagora/2013/07/data-visualization-points-of-view.html) of helpful articles on the topic.
* [**Visualizing Biological Data.**](https://vizbi.org/Posters/)  A collection of online posters to stimulate your creativity.

| **Attachment** | **Size** |
| --- | --- |
| File [A creative example poster template](https://mcmanuslab.ucsf.edu/sites/mcmanuslab.ucsf.edu/files/poster-template-1.ai) | 3.17 MB |
| File [A conventional example poster template](https://mcmanuslab.ucsf.edu/sites/mcmanuslab.ucsf.edu/files/poster-template-2.ai) | 814.47 KB |
| File [example of a style sheet](https://mcmanuslab.ucsf.edu/sites/mcmanuslab.ucsf.edu/files/style-example.ai) | 5.89 MB |

 [c02.png](https://mcmanuslab.ucsf.edu/sites/mcmanuslab.ucsf.edu/files/c02_0.png)

 [c09.png](https://mcmanuslab.ucsf.edu/sites/mcmanuslab.ucsf.edu/files/c09.png)

**FINAL NOTE**

As your poster is a publication, you need to ensure that all authors give their final approval. Questions that you may ask yourself: Will you be presenting unpublished results that may compromise your ability to publish? Will you be presenting data that will compromise future patentability due to your public disclosure?

*Plan to print your poster at least one week ahead of time.* Proper time management avoids stress and gives you and your authors the opportunity to assess the quality and practice presenting it. You never know who will be assessing it… perhaps potential reviewers for your publication, or someone who may be in a position to positively affect your ability to get a job.