Tips for making and presenting a scientific poster

Kim La Pierre (post-doc, University of California, Berkeley, kimberly.lapierre@berkeley.edu)

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Poster size

Before you do anything else, be sure to check how big your poster board space will be and/or size restrictions of the meeting/conference you will be presenting at. Set the correct poster size in your software before formatting your poster and adding text/images. It is really time consuming to have to go back and resize everything to fit a different size.

Sections of a poster

- Title: Keep to 1-2 lines of text across the top of the poster. Research has shown that more people will come see your poster if you only capitalize the first word of your title (i.e., use sentence capitalization) rather than every word.
- Author list: Full names of all coauthors and their affiliations.
- Abstract: Only include this if the meeting/conference you're going to requires it. If it must be included, keep it as short as possible.
- Introduction: Very briefly introduce the motivations for your research. Try to use pictures or conceptual diagrams as much as possible to cut down on words. Consider using your motivating question or big picture topic as the section header (*e.g.*, "Introduction: Do symbionts influence invasion?" or "Introduction: Plant invasion, Restoration, and Soil Microbes").
- Hypotheses: Briefly describe your hypotheses, ideally in bullet-points. Even better, depict your hypotheses in small conceptual figures that can be directly compared to your results figures. This section can be rolled into the introduction (see above).
- Methods: Keep these brief, ideally in bullet-points. It's ok to leave out details in this section, as you'll be there to verbally explain to your audience what you did. Just try to cover the main details.
- Results: Your results can be split over several sections, or presented in one big section. As much as possible, show your results visually rather than describing them in text. Consider stating your main results as the section headings for each figure (*e.g.*, "Microbial activity increases due to invasion").
- Conclusions: Briefly lay out the main take home messages from your research. Keep these in bullet-points, rather than paragraph form. Don't simply restate the results. You can also briefly outline the future directions of your work.
- References: Keep these to a minimum. It is ok to have no references at all for a poster!
- Acknowledgements: List the people and organizations that helped with your research, including funding sources, people you had helpful discussion with about your research topic, people who taught you a method you used, etc. This should include anyone who helped you with your work, but didn't make a big enough contribution to be a coauthor.

Text

– Sans serif fonts are easier to read from a distance, like your poster will be (*e.g.*, Arial, Tahoma, Verdana). Please don't use Comic Sans.
– Choose one font size for the title, one for the section headers, and one for the section text and stick to it. Some suggested sizes are below.

> Title: 90 pt
> Authors: 48 pt
> Section headings: 36 pt
> Main text: 24 pt

– Keep text to a minimum. Try as much as possible to depict hypotheses, complex concepts, and results in diagrams and figures. When in doubt, take text out!
– Avoid paragraphs, instead use bullet-points where possible.
– Your text should have high contrast with its background (e.g., white text on a very dark background or black text on a white or very light background). The text background should be solid, not an image or pattern.

Images

– Use high quality images (300 dpi or greater) to avoid ending up with pixelated images. Before sending your poster to be printed, view it at 100% on your computer screen to ensure that the images look ok.
– Consider putting a border around any figures to offset them from the background.
– If an image is not your own, be sure to attribute the image to its source. This can be done with small text in the corner of the image.

Data figures

– The best graphs don't have a colored background or grid lines.
– Use high contrast colors to distinguish treatments. Just make sure they are aesthetically pleasing and color-blind friendly.
– Label all axes! Also include a legend or labels for data when needed.

Organization

– Keep a logical flow through your poster, organized from top-to-bottom and left-to-right. Consider numbering each section so your audience can follow along easily.
– Avoid cramming too much into your poster. Keep some blank space to improve readability and aesthetics.

Presenting your poster

- Be prepared for people to come up and say something like, "Tell me about your poster."
    - Practice setting up your question, briefly describing the methods, going over each main result, and briefly concluding with your take home messages within a 3-5 minute time frame.
    - Also practice a one minute pitch for people who seem to be in a hurry.
    - Don't be flustered if you are stopped mid-spiel by a question or comment from your audience. Posters are great because they give you the opportunity to have a discussion, rather than talking at people from behind a podium.
    - If people come up while you're halfway through explaining your work to someone else, finish the explanation you've already started. Likely they came over because they heard you talking and were interested. If they have questions, they can ask.
    - Avoid using notes. Your poster is a great guide if you forget what you wanted to say.
- Also be prepared for people to come up and read your poster without saying anything to you.
    - In this case, a good option is to smile and say "Let me know if you have any questions."
- Don't assume people who come to your poster are familiar with your field or specific research questions/methods. Avoid jargon.
- Stand off to the side of your poster so you're not blocking it with your body. Utilize your poster as a prop. Point to the relevant sections or figures to guide your audience through it.
- Don't be discouraged if someone looks at your poster, or just your title, and walks away without saying anything to you. There are lots of people at a poster session and another one will be along soon.
- Dress nicely. Depending on the forum people may be more or less dressed up. If you're unsure, ask someone who has been to the meeting/conference before. Interestingly, if you color coordinate your outfit with your poster, more people will stop by to see it.
- Consider having printed copies of your poster on standard 8.5" x 11" paper for people to take if they are interested. This is especially useful at large conferences with lots of people. You can tack them up on the poster board next to your poster for people to take. But, printing this small really only works well if you kept text to a minimum and have nice big figures for your results.
- Consider having your contact information printed somewhere on the poster or printed and pinned up next to the poster so people can get in touch with you easily. You could even tack up nicely trimmed slips of paper or business cards with your information for people to take with them.

Sources/Where to learn more

- – Colin Purrington's guide: http://colinpurrington.com/tips/poster-design
- – Steven Block's guide:
  http://web.stanford.edu/group/blocklab/dos%20and%20donts%20of%20poster%20presen
  tation.pdf
- – Edinburgh Napier University guide:
  http://www2.napier.ac.uk/gus/writing_presenting/academic_posters.html
- – NYU Library guide: http://guides.nyu.edu/friendly.php?s=posters&gid=6791
- – Make Signs guide: http://www.makesigns.com/tutorials/