Poster Design Guide

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1 Introduction

Posters are a common way that scientists communicate new findings. Most professional scientific meetings (regardless of the field) consist of "talks" and "poster sessions". Talks are 15 minute presentations that are like mini-lectures and occur in sessions based around a single general topic (e.g., Endocrine Disruptors). During a talk you have a dedicated audience but your talk is usually competing with as many as 10 to 15 other talks, so not everyone that might have wanted to see it will get to.

During a poster session, the posters are displayed on large panels throughout the room and interested viewers can browse and read them at their leisure. Typically there is also a defined time (usually about 2 hours) where the poster authors are available to answer questions. Although a poster does not have a captive audience in the same way as a talk, interested viewers have much more time to see each poster. This is not to say that your poster will not have lots of competition. Poster sessions can contain 100s of posters, so poorly designed and confusing posters are overlooked for their more interesting neighbors without much thought.

2 Good Poster Design

Good poster design is based on conveying information in a clear and efficient manner so you can hold your viewer's attention in a very distracting environment.

2.1 Poster Laws

1. State your research question and hypothesis clearly and set it apart from other text.
2. Divide ideas clearly into separate and logical sections.
   (a) Viewers will read posters in small blocks, so each block has to keep them going to the next. If a section is too dense or confusing, your reader will quit.
3. Pictures and figures usually tell the story best.

(a) All figures and tables must be understandable without reading anything but the legend.

4. Anything you really want someone to read put in a bulleted list.

2.2 Poster Guidelines

1. Above all else the content must be easy to read and understand.
   (a) Use font and formatting changes sparingly and consistently.
   (b) Avoid meaningless decoration – All formatting and graphics should convey information.
   (c) Use colors to clarify comparisons – once you assign a color to something don't change it in the middle of the poster.
2. Make your title a one sentence summary of what you did and why it is important – your title is the first thing someone reads, you don't want it to be the only thing they read!

3 Poster Construction

One of the easiest (but not necessarily the best) ways to make a poster is to use PowerPoint to make a large slide. If you were printing your poster you would need to change the size of the slide to match the size of the final prited poster. Since we are projecting the posters on the screen, you can simply use the default slide size and let the projector enlarge your poster.

3.1 Specific Guidelines

1. Use picture and text boxes to organize the material on your poster.
2. Make sure that the text is readable – if you can read it when you preview it as a "slide-show" assume that the audience will be able to read it.
3. The actual layout of the poster is up to you but the following elements must be included:
   (a) Introduction
      i. This section provides the background for why you conducted the study.
      ii. The introduction serves the same purpose as in a written report but you have more freedom to use lists and other formatting to set apart key points.
   (b) Hypothesis
      i. Your hypothesis should be set completely apart from your introduction.

ii. Format the hypothesis to attract attention (e.g., bold or larger font).

(c) Materials and Methods

i. This section provides the details of what you did to perform your experiment.

ii. Keep it simple and direct.

iii. Lists or diagrams can be very useful.

(d) Results

i. Most of your results should be presented as pictures and figures.

ii. What you are comparing in figures should be obvious at a glance.

iii. Use lists or outlines rather than full blocks of text to report your results.

(e) Discussion

i. The discussion explains your findings within the context of previous work.

ii. This section is typically full text but as with the introduction make it clear and simple.

(f) Conclusions

i. This section lists the main "take home" message of your study.

ii. Always make the Conclusions section a bulleted list.

iii. Often your hypothesis and conclusions will be the only thing a reader looks at so pay special attention to both of these sections.

(g) Literature Cited – essentiall if you cite other work (and your should) but typically written in a smaller font and placed near the bottom of the poster

4 Assignment

For this assignment we are going to hold a formal poster session. Each group will project and present their poster as though they were explaining their poster to an interested viewer (i.e., the rest of the class). Presentations will be limited to a maximum of 20 minutes.

4.1 Effective Presentation Guidelines

1. Always open with your question and hypothesis and a brief statement of why your question is important.

2. Use the information in your poster to tell the story of what you learned about the system – don't simply proceed linearly through the introduction, methods, results, discussion.

3. When describing a figure, always orient your audience.

   (a) Explain what the axes represent

(b) Explain what the bars, points, error bars, etc... refer to.

(c) Explicitly point out what the figure is comparing.

4. After each new point, explain how this new information fits into the question and hypothesis.

5. Think about questions for a moment before you start to answer (the delay isn't as long as it feels) and don't hesitate to ask the questioner for more clarification if you don't follow what they are asking (this doesn't make you look dumb but rather thoughtful and conscientious).