

## Appendix 10 – Creating a Scientific Poster

---

“A scientific poster is a large document that can quickly and effectively communicate your research at a scientific meeting. This poster is composed of a short title, an introduction to your research question, an overview of your experimental approach, your results, some discussion of aforementioned results, a listing of previously published articles that are important to your research, and some brief acknowledgment of the assistance and financial support from others (see Figure 1). If all text is kept to a minimum, a person should be able to fully read your poster in less than 10 minutes.” (Purrington, C. No Date.)

### Goals for effective posters

(excerpted from Boslough, S. No Date. Create Effective Posters for Medical Presentations. Available at <http://office.microsoft.com/en-us/powerpoint/HA012276421033.aspx>, last accessed 12/07)

At a poster session, your poster has two goals. The first goal is to sufficiently attract the casual onlooker's attention so that he or she will stop and take a second look. After your poster has captured a viewer's attention, the second goal is for it to concisely communicate the results of your research. People who want more details and information can refer to a section on the poster that provides author contact information and can follow up with you after the conference.

### Principles of effective posters

You can present information in a poster in a number of ways. The following principles generally apply to good posters:

- A poster should present an overview of your work. It's not a journal article, so don't try to cram all the details onto the poster. A casual viewer should be able to glean your message in 3 to 5 minutes and read all the text in 10 minutes.
- A poster is a visual means of communication. Even if your poster consists entirely of text, a clean and uncluttered presentation will attract readers and help them comprehend your research. So much the better if you can include graphical elements (such as figures, charts, and photographs), which can help reinforce your conclusions.
- Determine how you will print your poster before you design it. Because not every printing option offers the same paper dimensions and because larger poster sizes generally cost more to print, first choose the paper size for printing and then design your poster accordingly. Then check with your printing vendor to find out whether you should be aware of any specific limitations or guidelines.
- A poster should be organized in sections in a way that's similar to how a scientific

article or oral presentation is structured. In your poster, lay out the sections in three or four columns. If the conference does not specify the sections that you must include, consider including the standard sections of a journal article: introduction, methods, results, and conclusions. You may also want to include an abstract, acknowledgments, and references.

- A poster should have a main title that's readable from 25 feet away. People will be wandering through the poster session, so you need to catch their eye from a distance. A general rule is to use a 72-point type and a common font such as Times New Roman or Arial for your poster title and to use a smaller size of the same font for the section titles.
- A poster should have body text that's readable from 4 to 6 feet away. Your poster may draw a crowd, and viewers will be more interested in your results if they can read about them without straining their eyes. Use 20-point or 24-point type and a common serif font such as Times New Roman for the body text.
- A poster should have one or two fonts and a simple color scheme. You should attempt to grab people's attention through the clarity of your presentation and impress them with the quality of your research. Don't distract viewers or dilute your message by using too many different colors, fonts, and font sizes.
- A poster should have serif fonts with proportional spacing. These fonts (such as Times New Roman or Century Schoolbook) are the easiest to read, which makes them a good choice for most text. Some people like to use a contrasting sans serif font (such as Arial) for titles, whereas others prefer to use only serif fonts.

### **Key points to remember about designing effective posters**

The principles listed in the preceding section may seem like a lot to remember, but designing a good poster really comes down to the following three key points:

- **Make it easy for your readers.** Viewers' attention will be in demand, so no matter how interesting your results may be, if they are badly presented, no one will take the time to read them.
- **The purpose of your poster is to present scientific information.** Don't get carried away with using a lot of colors and fonts, which might distract from the presentation of your research.
- **Your poster is a visual means of information.** If you have graphics that will help communicate your research results, you should include them. Additionally, keep the body text short and present only the key points; save the lengthy explanations for the journal article.

# Title that hints at the underlying issue or question

Your name(s) here

Department of Biology, Swarthmore College, Swarthmore, Pennsylvania, 19081

### Introduction

This is a brief and concise summary of the background information and the purpose of the study. It should include the following information:

- The general area of research
- The specific problem or question being addressed
- The significance of the study
- The objectives of the study

Use your own words to describe the study. Do not copy and paste text from other sources. Use your own words to describe the study. Do not copy and paste text from other sources.

### Materials and methods

This section describes the procedures used in the study. It should include the following information:

- The location of the study
- The subjects of the study
- The experimental design
- The data collection methods
- The statistical analysis used



Figure 1: Example for poster layout (Purrington, C. No Date. *Advice on Designing Scientific Posters*. Available at: <http://www.swarthmore.edu/NatSci/cpurri1/poster-template.ppt>, last accessed 12/07)

### Results

This section presents the data collected during the study. It should include the following information:

- The results of the study
- The statistical analysis used
- The conclusions drawn from the data

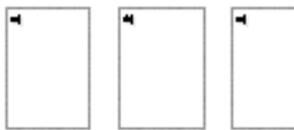


Figure 1: Example for poster layout (Purrington, C. No Date. *Advice on Designing Scientific Posters*. Available at: <http://www.swarthmore.edu/NatSci/cpurri1/poster-template.ppt>, last accessed 12/07)

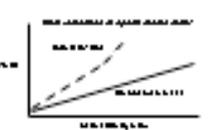


Figure 1: Example for poster layout (Purrington, C. No Date. *Advice on Designing Scientific Posters*. Available at: <http://www.swarthmore.edu/NatSci/cpurri1/poster-template.ppt>, last accessed 12/07)

Source	df	Mean square	F-value	p-value
Water treatment	2	10.000	270.000	0.0001
Groundwater treatment	1	0.000	0.000	0.9999
Initial water height	1	0.000	0.000	0.9999
Water treatment * Groundwater treatment	2	0.000	0.000	0.9999
Water treatment * Initial water height	2	0.000	0.000	0.9999
Groundwater treatment * Initial water height	1	0.000	0.000	0.9999
Error	160	0.000		

Figure 1: Example for poster layout (Purrington, C. No Date. *Advice on Designing Scientific Posters*. Available at: <http://www.swarthmore.edu/NatSci/cpurri1/poster-template.ppt>, last accessed 12/07)

### Conclusions

This section summarizes the findings of the study. It should include the following information:

- The main findings of the study
- The implications of the findings
- The limitations of the study
- The conclusions drawn from the data

Figure 1: Example for poster layout (Purrington, C. No Date. *Advice on Designing Scientific Posters*. Available at: <http://www.swarthmore.edu/NatSci/cpurri1/poster-template.ppt>, last accessed 12/07)

### Literature cited

This section lists the references used in the study. It should include the following information:

- The author(s) of the study
- The title of the study
- The journal or book where the study was published
- The year of publication

Figure 1: Example for poster layout (Purrington, C. No Date. *Advice on Designing Scientific Posters*. Available at: <http://www.swarthmore.edu/NatSci/cpurri1/poster-template.ppt>, last accessed 12/07)

### Acknowledgments

This section acknowledges the individuals and organizations that assisted in the study. It should include the following information:

- The names of the individuals and organizations
- The roles of the individuals and organizations

Figure 1: Example for poster layout (Purrington, C. No Date. *Advice on Designing Scientific Posters*. Available at: <http://www.swarthmore.edu/NatSci/cpurri1/poster-template.ppt>, last accessed 12/07)

### For further information

This section provides contact information for the authors. It should include the following information:

- The authors' names
- The authors' email addresses
- The authors' phone numbers

Figure 1: Example for poster layout (Purrington, C. No Date. *Advice on Designing Scientific Posters*. Available at: <http://www.swarthmore.edu/NatSci/cpurri1/poster-template.ppt>, last accessed 12/07)

