

# BASIC SCIENCE POSTER DESIGN

## A Short Guide

### About Science Posters

Science posters are essentially illustrated abstracts for use in public exhibits, at conferences, and other scientific gatherings. Their purpose is to inform and to provoke interest; they are not meant to replace regular abstracts or scientific papers. The conference poster's large size (often 3'x4', or 4'x6' or even 8' long) makes it less portable than an 8.5"x11" report, but the display area it provides means that complicated data sets can be graphically contrasted and understood more quickly and easily. A good science poster will attract people to it, hold their attention, and provide enough data that viewers will be able to ask informed questions, but will not require an hour of study to do so.

#### An effective poster is:

- **attractive**
- **well organized**
- **self-explanatory**
- **informative but digestible**
- **careful in linking text and imagery**
- **appropriate to its intended audience**

Data may be presented in a variety of ways, but visual elements can convey a great deal of information at a glance (analysis, of course, may take much longer). Tables, charts, photographs, and illustrations can lure viewers with bright colors and attractive graphic presentation (if done properly) but should not be solely relied on to hold a person's attention: text is important.

Likewise, a poster overburdened with text is not as likely to attract viewers: a large gray block of 10- or 12-point type with a small chart in the corner is not a design that takes advantage of the medium, and would be more suited to a regularly sized paper.

Posters are meant to be seen at a distance; science posters must work effectively both at a distance and up close (within two to three feet).

Titles and section headers should be large enough to be easily read from a distance of 12' or more, so that people across the room will know what the poster is about and thus be enticed to come find out more. Text of any sort should ALWAYS be legible, but titles may be used as graphic elements by using colored background banners, display fonts (not too fancy!), or other means of drawing the eye. It is more effective to maintain a strong, simple look to your poster rather than a cluttered or busy one. Text, captions, and footnotes should be much larger than the standard 12-point or smaller type used in papers and books. Consider 24-point type the absolute minimum, for use in footnotes only, and preferably much larger. Remember, your viewers will be standing back a few feet from the poster, not trying to read it from a few inches. If they have to get that close, it is unlikely they will spend much time on it.

### Producing Posters at SNRAS

All posters should have the SNRAS/AFES name and the University of Alaska Fairbanks logo or name on them. (For further information or to obtain copies of the logos, go to [www.uaf.edu/univrel/guide/logo](http://www.uaf.edu/univrel/guide/logo).) Steve Peterson is the primary contact for printing posters on the publications office's large format Hewlett-Packard plotter. This printer prints on rolls up to 42" wide and 100' long. Because of the demand for poster printing and the potential for file bugs and peculiarities, please schedule your poster two weeks before you need it, bringing your file in to the publications office ten working days before your required publication date. If brought in later than this, the publications office cannot guarantee that your poster will be finished by the date specified, particularly when operating under deadline for other publications.

Poster files should be brought to the publications office on CD or zip disk, or submitted via e-mail or uploading to our server.

## Poster Tips

- Give yourself plenty of time to plan and create your poster. Estimate the amount of time you think you will need, and then triple it.
- Remember your medium! A poster is not like a page in a report or a book. Plan your poster accordingly—sketch out a plan on a piece of paper beforehand, looking at blocks of text as graphic elements.
- You can use PowerPoint for simple layouts, or if you're working from a PowerPoint presentation. However, PowerPoint was not designed as a print program, and may not print some things correctly (for example alignment, certain symbols).
- We strongly recommend using a layout or graphics program such as Adobe Illustrator to ensure accurate printing, or for complicated layouts. Embed images and fonts (or create outlines of your fonts) in the poster file, or provide them to the publications office with your poster file. Creating a PDF file for printing helps reduce problems.
- Think in terms of visual elements rather than text.
- Tailor text and photos to the audience.
- Use a clean, simple design; a complex design can easily end up looking busy or cluttered and confuse the eye, making it harder for viewers to make sense of what they are looking at.
- Likewise, don't crowd too much information into your poster: highlight the essentials of your research and encourage the viewers to find out more, rather than overwhelm them with detail.
- Use top to bottom, left to right, boxes or columns for text (this parallels the way the eye travels when reading in most Western languages).
- Stick with one alignment scheme (left, right, or center); every element should align with something else. This helps to keep your poster from being confusing to the eye.
- Limit text length—in general, use text blocks of 100 words or less.
- Keep tables and graphics clear and simple.
- Include the UAF logo, the school name, and your basic contact information (e-mail, phone number, website, or address) on your poster. If your poster succeeds in intriguing fellow scientists, it is important to give them the means to contact you!
- Use maximum contrast (font, type size, color, background).
- Generally speaking, use only one background color, rather than blocks of many different ones.
- Use a resolution of 150 to 300 dpi for photos at the physical dimensions the photo will be printed at, otherwise your images may print with a jagged or pixelated look.
- Avoid small type (less than 24 points), and overuse of serif type (like this). Use sans serif type (like this) as it tends to be more readable from a distance.
- Avoid large blocks of reverse type (light type on a dark background).
- Make your poster title or main headers at least one inch high (72 pts or more), and preferably larger, to be visible from across the room.
- Proofread your poster **before** it gets printed.

## Lamination

- For traveling, laminate a 36"-wide poster to fit a standard poster tube, or use briefcase-sized panels.
- The SNRAS Publications Office can print on 42"-wide paper, but local copy shops and printers do not laminate paper wider than 36".
- Posters should be thoroughly dry before laminating to avoid smudging.

## Fonts

A **font** is a particular style of a **typeface**, or letter set. Fonts are classified according to their appearance and use. For example, **text fonts** are those used in the main text of a publication, such as the font used for these words (Adobe Garamond Pro Regular). Text fonts are designed for good legibility, particularly at small size. Text fonts may have **serifs**, or small hooks and flourishes at the ends of letters, as this one does, or not, as in the font Arial: **this sans serif font, as you can see, is devoid of extra flourishes**. Sans serif fonts are more legible for poster use.

**Display fonts** are used to attract attention, and often are printed at larger sizes. They can be quite fanciful and not necessarily legible. They convey importance, attitude, or emotion, and the characters may simply be those of a text font

used at large size or in a contrasting color, as in the red headlines in this brochure, or they may be decorative and with complex imagery. In a science poster, all display fonts used should be simple and highly legible.

Type is measured in **points**: there are 12 points in a **pica**, 6 picas in an inch; thus a capital E in 72-point type is, roughly speaking, 1 inch tall. Note that different fonts vary slightly in dimension even if they have the same point size. For example:

12-point Arial (text font)

12-point Minion Pro (text font)

**12-point Cooper Black (display font)**

## Sources

SNRAS Publications Manual. 2004. AFES/SNRAS Publications Office. MP 2004-11.

Stanford Undergraduate Research Program Best Practices in Poster Planning and Design. Available on line at [www.stanford.edu/dept/undergrad/urp/SURP/poster.html](http://www.stanford.edu/dept/undergrad/urp/SURP/poster.html).

Tips for Excellent Poster and Oral Presentations. American Society of Agronomy, Crop Science Society of America, Soil Science Society of America.

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## Web Resources for Poster Design

All of these are excellent resources for designing posters for the scientific audience. A Google search on science poster design revealed these and many other sites. Examples of both good and bad poster design are also available on line, as are poster award programs for good design.

[www.swarthmore.edu/NatSci/cpurrin1/posteradvice.htm](http://www.swarthmore.edu/NatSci/cpurrin1/posteradvice.htm)

<http://ublib.buffalo.edu/libraries/asl/guides/bio/posters.html>

<http://faculty.washington.edu/scporter/INQUAposters.html>

[www.pop.psu.edu/info-core/library/posters.htm](http://www.pop.psu.edu/info-core/library/posters.htm)

<http://ib.berkeley.edu/bioaape/design.type.html>

[www.stanford.edu/dept/undergrad/urp/SURP/poster.html](http://www.stanford.edu/dept/undergrad/urp/SURP/poster.html)

**Please feel free to contact the staff of the AFES/SNRAS Publications Office:**

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