Designing a Viewer-Friendly Research Poster

Poster sessions are a great venue for sharing your research with a wide group of people. When you create a poster to showcase your work, it can be difficult to know what information to include, how much, and how to best organize it. A confusing, distracting, or unprofessional poster can turn viewers away before they even learn the topic of your research.

This handout details some of these common problems researchers face when designing a research poster, and offers simple solutions to these problems. We do so by comparing three posters: two where the elements are effectively applied (Readable Research Posters 1 and 2) and one where the elements are not applied (The Unreadable Research Poster).

**Readable Research Poster 1**

**α-Synuclein’s Interaction with Liposomes of Fixed Curvature**

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**Motivation:** α-Synuclein

- Parkinson's disease is caused by nerve cell death, which leads to the accumulation of a protein called α-synuclein in the brain.

- These problems can be observed in a model of α-synuclein, a protein that has been shown to be toxic to neurons in vitro and to neuronal cultures in vivo.

- Recent work has shown that the structure of a cellular model is affected by the presence of α-synuclein.

- This model has been shown to be toxic to neurons in vitro and to neuronal cultures in vivo.

**Methods**

- Gold Nanoparticle Synthesis

- **Liposome Synthesis**

- Hybrid Lipid Bilayer Coating:

- Prepared according to the “Yang and Maruyama” method

- **Motivation:** α-Synuclein and Liposomes

- α-Synuclein’s interaction with highly curved liposomes produced a larger shift in the plasmon peak than with less highly curved liposomes.

- **Conclusions**

- The fraction of α-synuclein in the α-helix conformation decreases upon binding to both liposomes of fixed curvature and soft liposomes.

- α-Synuclein’s binding is small, highly curved liposomes (below), indicating a shift in the plasmon peak to the left.

**References**


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Visual Hierarchy
The information on this poster is well organized. Font sizes increase with importance (the title is the largest font size, followed by the headers, then the body text). The category that contains the most general information is at the top, and the category that the researchers want viewers to spend the most time on is the largest.

Headings
The headings are clear and to the point. Viewers know exactly what type of information to expect in each section and because the titles are generalized, viewers can easily recognize the relative importance of each section.

Use of Figures
When viewers look at research posters, their attention quickly moves toward the images and figures. This poster has carefully chosen figures that best represent the most important parts of their research, and has placed each of these important figures next to relevant text. The figures aid rather than distract from a viewer’s comprehension of the data.

Text
There is a reasonable amount of text on this poster. The text is in a reader-friendly font and size (36 to 44 pt for headings and 22 pt for body text) and sticks to explaining the “big picture,” or the core ideas, of the research. (Details of the research are best discussed verbally, with viewers who want to know more.) The text is also often chunked into bullet points, which helps readers quickly scan the information.

Colors
The major design elements on this poster are all one color. This helps unify the design and keep the focus on the text and figures, rather than on distracting headings or borders. When other colors are used, they help viewers understand information and do not distract viewers.

Whitespace
Rather than borders and boxes, this poster uses whitespace to organize and de-clutter content. This helps viewers to navigate the poster’s information without becoming overwhelmed.
The Unreadable Research Poster

Visual Hierarchy
Visually, it’s unclear what information on this poster is most important. All the text is similarly sized, and it is difficult to find the main points or “takeaways” of the research.

Use of Figures
The images, graphs, and other figures used in this poster are visually separated from the text with lines and boxes, and are not referenced within the text. This makes it difficult for viewers to understand how the figures support the conclusions, or otherwise fit into the “story” of the research.

Headings
The headings are lengthy, complicated, and in very small text that is difficult to read. These headings do not help viewers find their way around the poster.

Colors
This poster has many bright, distracting colors that compete for the viewer’s attention.

Text
This poster is crowded with text, which discourages viewers from reading it. Much of the text concerns relatively unimportant details of the procedure and results rather than main points or “takeaways”

Whitespace
This poster has almost no whitespace (space with no text or design elements) so it feels very crowded, which is uninviting to viewers. The whitespace is filled by unnecessary elements like borders and solid-color boxes.

Colors
This poster has many bright, distracting colors that compete for the viewer’s attention.