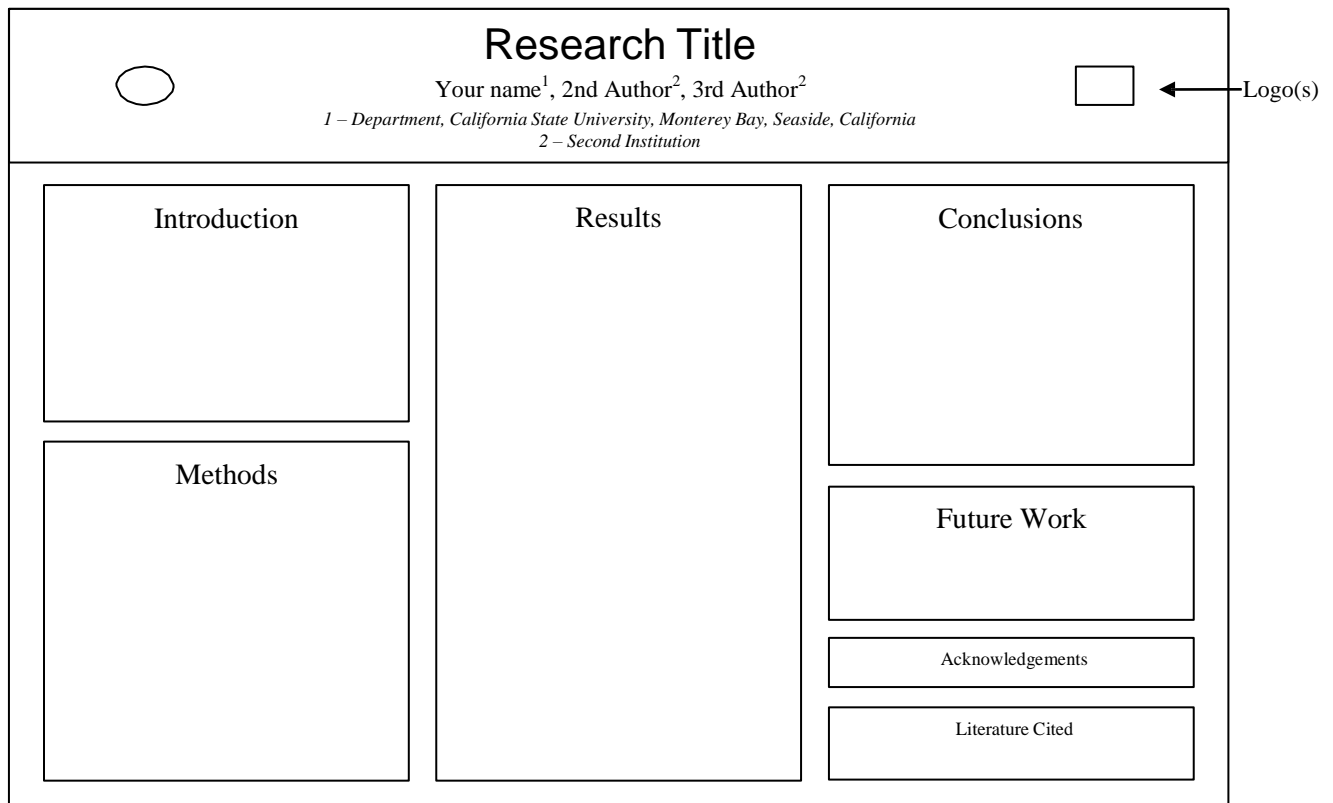# General Guidelines for Designing a Research Poster

Presenting at professional conferences is essential to establishing yourself as a researcher since it allows you to connect with other students, professionals, and potential graduate school mentors in your field. A research poster is a visual tool that guides the audience through your presentation in a clear and concise manner. Make sure you point to your figures (tables, graphs, maps, etc.) as you walk your audience through your project.

Example Poster Layout

Research Title

Your name[1], 2nd Author[2], 3rd Author[2]

1 – Department, California State University, Monterey Bay, Seaside, California
2 – Second Institution

← Logo(s)

Introduction	Results	Conclusions
Methods		Future Work
		Acknowledgements
		Literature Cited

Poster Elements

Title
- Should be brief, specific, and informative.
- It is often the first thing viewers examine.
- Remember to use keywords to attract viewers to your poster.

Author(s)
- Ask your mentor how to list authorship.
- Make sure you get permission from each individual that you list as a coauthor – each coauthor must approve the final poster.
- If authors are from different institutions (e.g. you are from CSU Monterey Bay, your second author is from Hartnell College, and your third is from Stanford) list your names and accompanying institutions under the project title as:

Your name[1], 2nd Author[2], 3rd Author[3]

1 – Department (e.g. Science and Environmental Policy), California State University, Monterey Bay, Seaside, California
2 – Department, Hartnell College, Salinas, California
3 – Department, Stanford University, Stanford, California

Abstract (optional, but check conference requirements)
- Include a brief (100 – 200 words) synopsis of your entire project:
- Purpose of the research
- Methodology
- Key data and results
- Your major conclusions
- The abstract is often the second thing viewers examine.
- Viewers will often decide whether or not to engage in a discussion with you based on the abstract.

Note: The abstract you include on your poster does *not* have to be the same as the abstract you initially submitted to the conference.

Introduction
- Describe the background of your study. What is the problem you are addressing with your research and why is it important? What is the context of your research within your discipline?
- **Specific Research Questions, Hypotheses, or Goals** (may be included as separate section)**.** Highlight your research questions, hypotheses, and/or goals. Sometimes your questions and hypotheses will be repetitive. If this is the case, state one or the other.

Note: You may not need both an abstract and introduction section. Check with your mentor and the conference's poster guidelines to determine what to include.

Methods
- Describe the methodologies used to test your hypotheses or answer your questions.
- Include details about your study system (e.g. locations, subjects/species, theoretical frameworks), and how you collected and analyzed your data.
- Great place for photos.

Results or Preliminary Results (if still in progress)
- State your key findings without providing interpretation.
- Use figures, graphs, or tables to present your data visually.
- All figures, graphs, and tables should:
  - Have clear axis labels and include a legend explaining any symbols or abbreviations used.
  - Be numbered and have a short caption explaining them.
  - Be referred to in the text by number.

Discussion / Summary / Conclusions
- Don't just restate your results, interpret the! What do they mean? How do they address your problem or question? How do they relate to other findings and help advance the state of your discipline?
- Use this section to highlight the take-home message of your research.
- **Future Work** (may be included as a separate section). Describe your next steps, if applicable, or what you would do further to build on your findings.

Acknowledgements
- Thank the individuals who are *not* listed as coauthors and/or lab(s) that assisted you with your research.
- Acknowledge your funding sources.
- If you need to include logos from the lab you are working in and/or from your funding sources, place them under this section. Some people also choose to place them next to the title, but the space often gets cluttered.
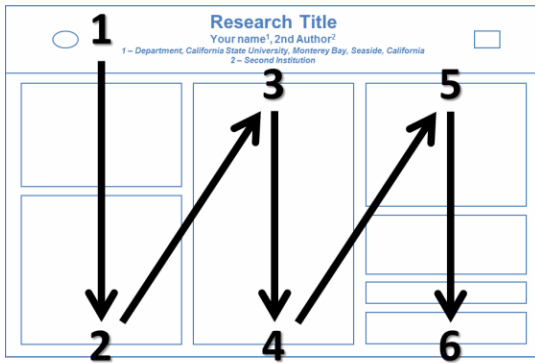
Literature Cited
- Only list articles and books that you cited in the text of your poster.
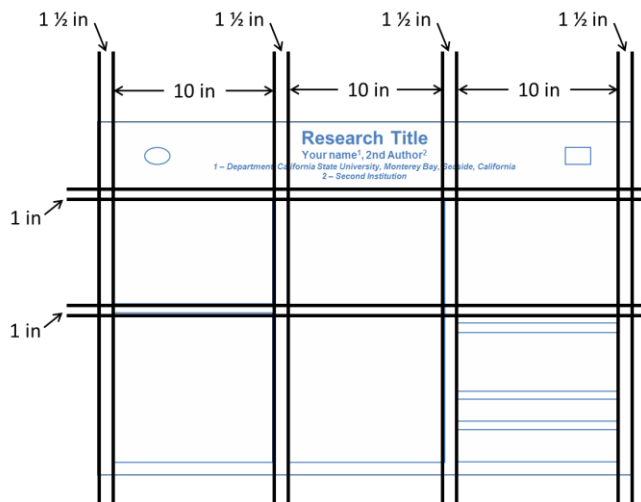- Follow the same citations guidelines you would use for writing a report.

Design

Layout

- The poster should be arranged so that there is a logical flow from one section to another. The reader should not have to search for headers to know where to look next. Traditional English reading flow is from top to bottom and then left to right

- Use grids and guides to help with consistent layout (and USE the Align function in your software!). Properly aligned elements look clean and professional.

- Left justify text. Full justification is harder to read. Use centered text sparingly.

YES	NO	NO
Lorem ipsum dolor sit amet, consectetur adipiscing elit. Sed sed lacinia dui. Suspendisse vulputate ultrices eleifend. Etiam a urna libero	Lorem ipsum dolor sit amet, consectetur adipiscing elit. Sed sed lacinia dui. Suspendisse vulputate ultrices eleifend. Etiam a urna libero	Lorem ipsum dolor sit amet, consectetur adipiscing elit. Sed sed lacinia dui. Suspendisse vulputate ultrices eleifend. Etiam a urna libero

- Allow lots of blank space between visual elements. Cramming to much in affects readability and flow.

Typeface

- Select legible typefaces that do not distract from the content, and use them consistently.
- A good rule of thumb is to choose one san-serif typeface for titles and headings, and one serif typeface for body text. Options vary depending on your operating system and software, but standard combinations include:
  - **Helvetica / Palatino** (Mac OS)
  - **Arial / Times New Roman** (MS Windows pre 2007)
  - **Calibri / Cambria** (MS Windows post 2007)
- All text should be large enough for viewers to read from 4 – 6 feet away, and should be consistent across sections of your poster. Here are some general guidelines for font sizes:
  - Title: 90-150 point bold.
  - Author(s): 36-42 point bold.
  - Headings and Subtitles: 36-54 point bold.
  - Main Text: 28-32 point.
  - Figure Captions, Acknowledgements, Literature Cited: 18-28 point.

Graphics

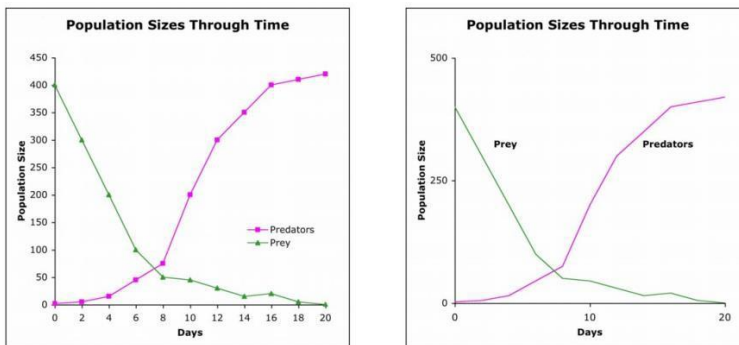- Keep graphics clear and simple to facilitate communication.

Image taken fromL http://www.cns.cornell.edu/documents/ScientificPosters.pdf

- Use graphics of proper resolution. For high-quality printing a resolution of 150-300dpi is appropriate.
- Don't stretch images or logos. Most programs allow you to lock an image's aspect ratio.

- Avoid busy backgrounds, and backgrounds that don't provide adequate contrast with your text and graphics.
- Avoid dark backgrounds, unless you use shading to increase text contrast. Dark-colored backgrounds also may not dry completely and smudge easily.
- Avoid putting lines/borders around text boxes, and make sure there is ample border between text and visual elements.

Tips for a Successful Poster:
- Start early to allow enough time for several revisions.
- Give your eyes a visual rest.
- Limit text whenever possible.
- Use visuals.
- Choose colors carefully.
- Review your poster with your mentor and UROC staff.
- Check out the "Helpful Links" to online resources at the end of this document.

Poster Printing:
For step-by-step instructions on how to prepare your poster for printing, refer to the "How to Create a PDF Poster File".

Other notes:
Every conference is unique. Some have specific requirements with regards to what sections need to be present in your poster while others allow more flexibility. In order to save yourself time, consult the conference website for poster requirements. Also, make sure to check the maximum poster size requirements for each conference at which you will be presenting before you begin designing your poster.

Helpful Links:
- SACNAS Video Tutorials: http://www.vimeo.com/6178533
- Creating an Effective Research Poster:
  http://www.tc.umn.edu/~schne006/tutorials/poster_design/design_01.htm
- Poster Design Blogs:
  - http://colinpurrington.com/tips/academic/posterdesign
  - http://betterposters.blogspot.com/
- Check out UROC student posters here: http://uroc.csumb.edu/site/x24866.xml

UROC has poster templates available that have been set up for you in PowerPoint.