



# Creating an Academic Poster

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# Objectives

- Describe the steps for formatting and designing an academic poster.
- Discuss the creation of appropriate poster content.



# Academic Posters...

- sell your work in ten seconds.
- should be eye catching.
- are a simple, yet effective way to display research data.
- contain a mixture of brief text mixed with visual data representations.



# Poster Presentation

- At a conference, a member of the research team stands by the poster display while conference attendees can come and view the poster.
- If you succeed in capturing someone's attention, you have about 30 seconds to convey an overall understanding of the project.
- If they are interested, they will spend additional time exploring the information and asking questions.
- A poster provides an opportunity for making valuable contacts and engaging in meaningful dialogue with colleagues.
- A poster can convey your message to a large audience. However, if your poster does not grab people's attention, your efforts have been in vain.



# ***So how can I visually share my research?***

*"It takes intelligence, even brilliance, to condense and focus information into a clear, simple presentation that will be read and remembered. Ignorance and arrogance are shown in a crowded, complicated, hard-to-read poster."*

**Mary Helen Briscoe**



# Poster Development Steps

- Conceptualize
  - Audience
  - Guidelines
  - Material
- Development
  - Sizing
  - Outline of content
  - Design
  - Layout
  - Flow
- Review
  - Outside perspective
  - Collaborator feedback
- Print



# Where to begin

- Review conference poster guidelines
  - Check for sizing information
- **Correctly size poster before adding content**
- Use conference abstract submission to begin condensing your work into concise, easily understandable points
- Think about creating a **storyboard**
  - Create a rough visualization of your poster
  - Should contain no content or data
  - Enables you to visualize the dimensions of poster and provides a rough outline of the approximate proportions of space that will be devoted to each section



# Choose Software

- Powerpoint
- Publisher
- Adobe Illustrator
- Photoshop

\*Complete the entire poster on a single platform to avoid formatting issues or lost image files.





# Design

- Color
  - Use sparingly
  - Stick to a few colors that compliment each other
- Font
  - Keep it consistent
  - Bigger is better: Information should be readable from 6 – 10 feet away
  - Sans serif
  - Keep word count low
- Create columns for structure
  - Avoid blocks of text longer than 10 sentences
- Background=light colored
  - Make sure there is contrast between background and text
- Use headlines, bullets, numbering to make it easy to read
- Use all space
- Label clearly
- Keep it clean – simple colors, simple background, simple font





# A Good Title is Key

- Should briefly convey the most interesting finding or issue of your research
- Sell your work!
  - Needs to be catchy in order to reel in conference attendees
  - Pose a question, define project scope, or hint at major finding
  - Short, sharp, and compelling
- Never use all caps in title
- Eye catching and prominent on page
- Avoid confusing acronyms



# Poster Layout

- Many templates can be found online
- Make sure the layout is:
  - Organized
  - Has a clear flow
  - And well defined sections
- Use prominent category headings
- Leave breathing room around text
- Guide eyes from one succinct frame to another in a logical fashion from beginning to end
- Use arrows, numbering, etc. to move from one logical step to another
- Make sure the main points can be read at eye level
- Don't bury conclusions
- Use lists of sentences rather than blocks of text



# Content

- Effectively summarize project information and generate discussion
- Well structured just like academic writing
- Concise distillation of the work
  - Limited space to share your work
- Highlight major findings and most interesting things about research



# Content Elements

- Introduction
  - Get your viewer interested in the issue or question
  - 200 words
- Objectives
  - <100 words
- Methods
  - Briefly describe procedure, but not with the detail used for a manuscript
  - Use figures and flow charts to illustrate experimental design
  - Mention statistical analyses
  - 200 words
- Results
  - Briefly describe qualitative and quantitative results
  - Include presentation of data analysis
  - Refer to supporting charts and figures
  - 200 words
- Conclusions
  - Remind reader of the major result and try to convince why the outcome is interesting
  - State the relevance of your findings to other published work, relevance to real world, and/or future directions.
  - 200 words



# Visuals

- Keep posters visual – think of it as an illustrated abstract
- Incorporate images, diagrams, graphs and figures when appropriate
- Visuals can be used to create a clear portrayal of complex concepts
- Graphs and figures should be saved as PNGs before being imported
- Make sure to include headings, labels, scales and brief explanations for visuals
- Picture resolution – at least 150 dpi
- Make sure that details on graphs and photographs can be comfortably viewed from 6 feet away
- Use web graphics with caution (low resolution and copyright)
- Don't clutter your poster with images, logos, etc.



# Poster Review

- Ask someone outside the project to review poster
  - Format
  - Flow
  - Content
  - Spelling/grammar
- Get feedback from co-authors
- **ELIMINATE** all extraneous material



# Printing

- Export to PDF before printing
- Confirm size with printer
- Specify matte or gloss paper

Finished Poster Size	Page Size in PPT	Enlargement when printed
36" x 48"	36" x 48"	100%
36" x 56"	36" x 56"	100%
36" x 60"	18" x 30"	200%
36" x 72"	18" x 36"	200%
48" x 56"	48" x 56"	100%
48" x 60"	24" x 30"	200%
48" x 72"	24" x 36"	200%
48" x 84"	24" x 42"	200%
48" x 96"	24" x 48"	200%





# Other components to remember

- Acknowledgments
- Citations
- Provide further information
  - QR code
  - Provide URL to electronic copy of poster
  - Printed handout
- Contact information



# O<sup>6</sup>-Benzylguanine Inhibits Tamoxifen Resistant Breast Cancer Cell Growth and Resensitizes Breast Cancer Cells to Anti-Estrogen Therapy

Joshua Smith<sup>1</sup>, George C Bobstnar<sup>1</sup>, Rafael Madro-Vlahaj<sup>1</sup>, Jimmie Culver<sup>1</sup>, Beth Isley<sup>1</sup>, Jonathan Ticker<sup>1</sup>, Kalkunte S. Selvensingal<sup>1</sup> and Saathi Koslari<sup>1</sup>

Cancer Research Institute of M.D. Anderson Cancer Center Orlando, Texas Tech University Health Sciences Center, Amarillo, TX



### Abstract

Abstracts rarely being read and posters not being read are two major reasons for the low impact of scientific presentations. The abstract is the first and most important part of a poster. It should be concise, clear, and to the point. It should state the purpose of the study, the methods used, the results obtained, and the conclusions drawn. It should also include a list of keywords and a list of references. The abstract should be written in a clear, concise, and professional manner. It should be easy to read and understand. It should be written in a way that is appealing to a wide range of audiences. It should be written in a way that is easy to read and understand. It should be written in a way that is appealing to a wide range of audiences.

Posters rarely need abstracts

### Introduction

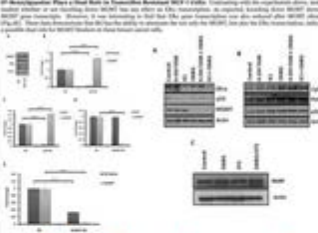
The introduction of a poster should be brief and to the point. It should state the purpose of the study, the methods used, the results obtained, and the conclusions drawn. It should also include a list of keywords and a list of references. The introduction should be written in a clear, concise, and professional manner. It should be easy to read and understand. It should be written in a way that is appealing to a wide range of audiences. It should be written in a way that is easy to read and understand. It should be written in a way that is appealing to a wide range of audiences.

Text dissolves into intimidating, boring gray

### Results

The results section of a poster should be clear and concise. It should state the results of the study, the methods used, the results obtained, and the conclusions drawn. It should also include a list of keywords and a list of references. The results section should be written in a clear, concise, and professional manner. It should be easy to read and understand. It should be written in a way that is appealing to a wide range of audiences. It should be written in a way that is easy to read and understand. It should be written in a way that is appealing to a wide range of audiences.

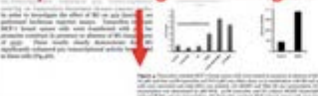
Additional text in the results section that is not clearly visible or is too small to read. This text is often lost in the background of the poster.



Too small and too much

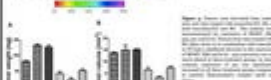


Caption not aligned with figure



Crammed!

Text that is too dense and difficult to read. The text is packed closely together, making it hard to see.



Crammed!

### Conclusions

The conclusions section of a poster should be clear and concise. It should state the conclusions of the study, the methods used, the results obtained, and the conclusions drawn. It should also include a list of keywords and a list of references. The conclusions section should be written in a clear, concise, and professional manner. It should be easy to read and understand. It should be written in a way that is appealing to a wide range of audiences. It should be written in a way that is easy to read and understand. It should be written in a way that is appealing to a wide range of audiences.

### Acknowledgments

The authors would like to thank the following individuals for their assistance in the completion of this project. Their names are listed below.

## Tips for Designing Effective Presentations

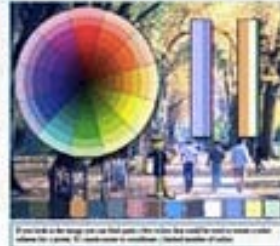
A poster with the main title in 1/2" sans serif

Developed by D. Shong, C. Dwyer, M. Katty, E. Inman, and K. Wink with revisions directed by Penn State's Education Technology Services

Get the audience's attention and communicate your message quickly and succinctly.



Capture your message clearly. This is a poster of an abstract regarding cancer therapy. Identify where a viewer's attention goes, and how to attract it.



Use color in your design to draw your audience's attention. Use color to create a visual hierarchy. Use color to draw attention to key information.



Use color to draw attention to key information.

### Choosing and Using Color

Use color to draw attention to key information. Use color to create a visual hierarchy. Use color to draw attention to key information.

### Writing Fonts and Using Size

Use a sans serif font for the main title. Use a serif font for the body text. Use a larger font size for the main title. Use a smaller font size for the body text.



Use a sans serif font for the main title. Use a serif font for the body text. Use a larger font size for the main title. Use a smaller font size for the body text.

**Planning**  
Easy to read  
Use a sans serif font for the main title. Use a serif font for the body text. Use a larger font size for the main title. Use a smaller font size for the body text.

**Developing a Layout**  
Use a sans serif font for the main title. Use a serif font for the body text. Use a larger font size for the main title. Use a smaller font size for the body text.

**Using Images**  
Use images to draw attention to key information. Use images to create a visual hierarchy. Use images to draw attention to key information.

### Judges Checklist

- 1. Title of the poster
- 2. Abstract
- 3. Introduction, methods, and results
- 4. Conclusions
- 5. Acknowledgments
- 6. References



Viewers reading this line demonstrate the poster's success!



# Remember!

- Catch the readers attention
  - Reel them in with eye-catching and descriptive title
- Make your poster visually pleasing
  - Large, easy to read font
  - Prominent section headings
  - Clear and effective visuals
- Poster layout and format are critical
  - Create a logical organizational flow of information
- Content is key, but keep it concise
  - The number one mistake is to make your poster too long!
- Add a little personality!



# References

- Designing conference posters(Colin Purrington) - <http://colinpurrington.com/tips/poster-design>
- The University of North Carolina at Chapel Hill Graduate School (Poster and Presentation Resources) - <http://gradschool.unc.edu/academics/resources/postertips.html>
- How to Create a Research Poster (Poster Basics) - <http://nyu.v1.libguides.com/friendly.php?s=posters&gid=6791>
- University at Buffalo Libraries (Poster Presentations) - <http://libweb.lib.buffalo.edu/guide/guide.asp?ID=155>
- Erren, Thomas and Philip Bourne. Ten Simple Rules for a Good Poster Presentation (PLoS Computational Biology) - <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1876493/>
- Designing an Academic Poster (prezi.com) - <https://prezi.com/0e1ftr5f7zlz/designing-an-academic-poster/>
- University College (Poster Presentation Tips) - <https://nau.edu/undergraduate-research/poster-presentation-tips/>
- Creating Effective Poster Presentations (An Effective Poster | Creating Effective Poster Presentations) - <http://www.ncsu.edu/project/posters/>
- Poster Design Tips (Poster Design Tips) - <http://lti.lse.ac.uk/poster-design/>
- Creating Large Format Posters Using PowerPoint (Wake Forest Baptist Medical Center) - <http://www.wakehealth.edu/Creative/Resources/Tip-Sheets/Creating-Large-Format-Posters-Using-PowerPoint.htm>
- Poster Design (k.m.everson) - <http://www.kmeverson.org/academic-poster-design.html>
- American Society of Plant Biologists (American Society of Plant Biologists) - [http://my.aspb.org/members/group\\_content\\_view.asp?group=72494&id=100256&CFID=1465419&CFTOKEN=c96de5cc83ade3e4-974E0A73-9508-92C5-C080C1EA9AC9929F](http://my.aspb.org/members/group_content_view.asp?group=72494&id=100256&CFID=1465419&CFTOKEN=c96de5cc83ade3e4-974E0A73-9508-92C5-C080C1EA9AC9929F)
- <http://www.the-scientist.com/?articles.view/articleNo/31071/title/Poster-Perfect/>
- <http://hsp.berkeley.edu/sites/default/files/ScientificPosters.pdf>
- [https://courses.physics.illinois.edu/phys596/fa2013/Lectures/ScientificPosterTips\\_FA12.pdf](https://courses.physics.illinois.edu/phys596/fa2013/Lectures/ScientificPosterTips_FA12.pdf)