

# **Creating an effective scientific poster presentation: A guide to preparing and presenting your data**

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# What is an effective poster?

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# What is an effective poster?

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- A well told story
  - States a specific question and responds with a single conclusion
- Graphically appealing
- A tool to initiate conversation
- Has organized structure
- Best represents yourself and WVU (i.e. a brand)

# A stepwise approach to poster creation

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1. Write a clear and concise abstract
2. Read (and memorize) the guidelines
3. Start early and plan your approach
4. Focus your layout design
5. Choose an appropriate color theme
6. Create effective titles and sub-titles
7. Incorporate useful graphics
8. Scrutinize your text font and size
9. Edit
10. Let your peers review
11. Re-edit
12. Practice your presentation (practice again)
13. Present your poster

# 1. Poster creation starts with the abstract

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- Does your abstract...
  - highlight the problem?
  - state an objective?
  - mention your approach?
  - include how you analyzed your data?
  - describe your results in an organized manner?
  - have a single, cohesive conclusion?
  - feature potential implications?
  - meet submission requirements?
  - have the correct list of authors?
  - reflect a well-organized and successful professional?

Know the  
requirements!

## 2. Read (and memorize) the poster guidelines

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- What are the dimensions?
- Font requirements?
- Unsure? Ask conference organizers for assistance

# 3. Start early and plan your approach

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- Sketch your preliminary design on paper
- Create a timeline for yourself

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<b>Weeks prior to conference</b>	<b>Task</b>
5	Create first draft of poster
4	Have others review
3	Improve your poster
2	Practice your presentation by yourself and with your peers
1	Print your poster (don't wait until the last minute)

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- Each poster should be unique, don't re-use old designs

# 4. Focus your layout design

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- Think of your poster as real estate and capitalize
  - What is the most and least valuable “real estate”?
    - Title and authors: Top 20%
    - Problem and objectives: Top left [box this text]
    - Conclusion: Top right [box this text]
    - Materials and methods: Bottom left
    - Most important result (Figure, Table, etc...): Top center
    - References and acknowledgements: Bottom right

# 4. Focus your layout design

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- Identify blank (white) space and make sure you have enough
- Make sure your segments align (zoom in and verify with ruler)
- Avoid too many small sections
- Make sure printing won't cut off sections
- Include personal professional photo
  - No pictures on a swing, at the beach, or at the gym.
  - Don't have a professional photo, don't include one!

# 5. Choose an appropriate color theme

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- Always remember – “Less is More”
- When choosing a color theme
  - Use no more than three colors
  - Minimally use intense, bright colors
  - Use a light colored background and dark letters for contrast
  - Avoid dark colored backgrounds
  - Avoid using green with red
  - Avoid black and white
  - A possibility: use the same colors as your college
  - Not a designer? Try: <http://colorschemedesigner.com/> *with* <http://html-color-codes.info/>

# 6. Create effective titles and sub-titles

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- At the minimum, readers will read title(s) – captivate them!
- Be bold, make strong statements
- Avoid “Effect of...”
- For main title or when applicable describe results not methods
- Be as concise as possible
- Be unique, separate your study from your peers
- Minimize extensive use of scientific jargon
- Avoid using acronyms in main title
- Avoid discussing methods in titles (unless this is subject matter)

# 7. Incorporate useful graphics

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- Graphics are powerful when they are simple and polished
- Photos should have borders to match color theme
- Generate publication quality graphics (saves time)
- Use 2-dimensional line graphs, bar charts, and pie charts
- Text on graphs should match main text
- Avoid within graph backgrounds and gridlines
- Minimize number values within axes
- Use a university-approved logo: [http://design.ur.wvu.edu/graphics/wvu\\_logos](http://design.ur.wvu.edu/graphics/wvu_logos)
- Avoid cheesy clip art
- Only use 1-sided error bars
- Use tables only if necessary
- Use flow charts to simplify methods (avoid chaos)

# 8. Scrutinize your text font, size, and usage

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- Use Serif or Sans Serif fonts (e.g. Arial, Helvetica, Verdana, or Tahoma)
- Use the same font throughout (maintains flow)
- Don't use UPPERCASE
- Use **bold** or *italics* to sparingly emphasize key points
- Don't use full justify (leaves gaps); rather left-align
- Start with these recommendations, then modify:
  - Title, 90 pt; Authors, 60 pt; Sub-headings, 40 pt; Body text, 30 pt; Captions, 20 pt
  - Never use less than 18 pt

# 8. Scrutinize your text font, size, and usage

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- Avoid excessive usage of text
- Text should be readable from 6 feet away
- Leave empty space around your text
- Avoid using drop shadow
- Align your text boxes
- Balance space with text
- Avoid never ending paragraphs, use bullets

# 9-12. Edit, Review, Re-edit, Practice

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- Just because you finished your poster doesn't mean the poster (or you) are ready for the conference.

# 13. Present your poster!!!

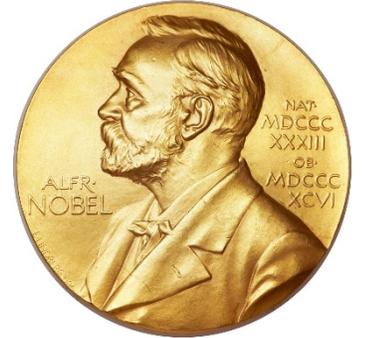
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- Arrive early and secure your poster
- Have copies of poster ready in folder (ask PI for permission)
- Relax and exude confidence
- Dress professionally
- Have business cards in pocket
- Write down names of those that express interest
- When someone approaches...
  - First minute, let them scan
  - Second minute, introduce yourself and ask if they would like an overview or have any questions
  - Wrap up within 5 minutes
- Looking for a Ph.D. or post-doc? Let your audience know
- Collect your poster at conclusion

# Are you competing?

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- Get your advisor involved
- Attend competition year prior if interested
  - Attend entire session and take notes
- Study guidelines
- If possible, know your judges
- Wipe your hands on clothes prior to handshaking
- Step 3 feet in front of the poster prior to arrival of judges (gives you extra space)
- Clearly demonstrate problem, approach, results, and implications
- Emphasize innovation
- Make eye contact with judges
- Keep your back straight and chin up
- Speak loudly but don't shout
- Use their names (e.g. Do you have a question Dr. Suchandsuch?)
- Thank the judges for listening



# Final words

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- Stay focused and convey one message
- When it comes to text, less is more
- You must practice to gain confidence

# Last minute tips

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- Use a satin finish if possible, avoid high gloss
- Don't use check boxes as bullets
- Use a poster tube
- Don't print your poster at the meeting
- Don't ship your poster to the meeting
- Minimize use of references (limit to 5)
- Shorten references to save space (e.g. Smith et al. 2013. J. Biol. Chem. 79:1421.)
- Complete sentences are not required
- Avoid excessive use of acronyms
- Fig. 1 (instead of Figure 1) is acceptable.
- " $P < 0.01$ " instead of " $P < 0.0001$ " – to save space
- Don't include abstract unless required
- Complete sentences (or even periods) are not necessary
- Use abbreviations for time (e.g. y, d, m, and wk)
- Brush your teeth and use breath mints