Preparing a Scientific Poster Presentation
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Class Website

  - Additional resources as links
  - Copies of presentations
    - I will continue to bring paper copies to class for everyone
Poster Assignments

- Poster session
  - August 19, 10AM, SCC 303
  - Be sure to prepare and print well in advance

- Practice layout
  - See handout
  - Due July 20 or 21
Comments on Presentations

- Overall - great job!
- Try not to use note sheets for final presentations (practice before)
- Include mentor and PI as authors on title slide
- Outline and materials slides generally not necessary
- Check that figures and text are readable
- Reference all figures that you did not draw yourself
- Label figures
- Usually do not animate text slides
- Write out terms first before using abbreviations
- Present your own introduction (do not worry about being repetitive)
The Poster Presentation

- Most common formal presentation
  - Large conferences and limited number of oral presentations = lots of posters
  - Majority of presentations at a conference will be posters
  - Undergraduate students, graduate students, post-doctoral fellows

- Discussion and immediate feedback
  - Interactive scientific communication
  - Demonstrate scientific knowledge and interpersonal skills
  - Test validity of work
    - Do people “get what you do”?
Objectives for a Poster

- Static, visual medium that acts as “bait”
  - Wandering audience, not committed to you
  - 11 seconds to catch someone’s attention
    - 10 minutes spent on poster
- Include enough content to further discussion
  - “Walk me through your poster”
  - Content complete when you are not there
- Introduction to you and your work
  - Leave a lasting impression
  - Visually and conceptually
Advantages and Limitations

Advantages

- Viewer free to read at own pace
- Large canvas to present figures and illustrations
- Less practice (of delivery) than an oral presentation
- Personal interaction with audience members
- Entire project on display

Limitations

- Have to attract audience
- Space constraints
- Takes a lot of time to prepare and polish
- Have to “present” repeatedly
What to Avoid

- Messy
- Cramped
- Unorganized
- Difficult to read
- Unbalanced
- Disproportionate
What It Is Not
Keys to an Effective Poster

- Organized and well laid out
- Easy to see and read from a distance
- Maximize graphics and minimize text
- Use lists and bullet points
- Avoid grammar or spelling mistakes
- Use simple, non-distracting background
- Balance
Before You Begin

- Sketch out the envisioned layout
  - Poor planning cannot be disguised

- Know the size restrictions
  - Use the fully allotted space within reason
  - Horizontal or vertical layout
  - Space dictates content
  - 3’ tall x 4’ wide is good starting point
Format

- Large, single sheet
  - Typically preferred
  - Poster printer

- Letter-size panels
  - Growing obsolete with poster printers

- Combination
  - Text boxes on single sheet
  - Individual sheets on poster board
Layout

- Typically horizontal (4’ tall x 8’ wide)
  - Check allotted space ahead of time
- Flow of information
  - Vertical columns (like newspaper)
  - Horizontal rows
  - Centered focus with branching panels (uncommon)
- Rule of 1/3’s
  - Divide canvas into 9 quadrants
Content - Main Sections

- Required
  - Title - author names and affiliation
  - Introduction - relevance and significance
  - Results - select most important data
  - Conclusion - main points (often bullets)
  - Full References - if used

- Beneficial
  - Abstract
  - Methods (or Materials) - as schematics
  - Future Work
  - Acknowledgements
Background and Organization

- Color scheme
  - Good contrast between different colors
  - No more than 3-4 colors
  - Dark text on light background or light text on dark background
  - Minimal patterning on background

- Organization
  - Title - top, center
  - Abstract - upper left
  - Conclusion - bottom right
Efficient delivery of the main message
- Omit a lot of details (i.e. in methods)
- Provide enough to comprehend ideas (particularly in background)

Do not use all UPPERCASE

Leave sufficient spacing between lines

Headings: 3-4 words long

Include figure captions

Aligned left or justified
- Watch for wide or awkward spacing
Fonts and Sizing

- Be consistent throughout
  - Use only 1-2 font types
- Should be readable from 4-5 feet away

Styles
- Sans-serif (titles, headings) Arial
- Serif (body text) Times

Sizing
- Title: ≥ 84 point
- Name and affiliation: ≥ 72 point
- Headings: ≥ 36 point
- Text: 18-24 point
Title

- No more than 8 words, preferably
  - Keep it on one line
- Place at the top in the center
  - First place people naturally look
  - Center the text
- Make it stand out
  - Visual and meaningful
- Authors and affiliations immediately below
  - Underline presenting author
Figures

- Every figure needs a caption or legend/title
  - Enough information to stand alone
- Font large enough to be readable
- Clear labels and arrows
- Scale bars where appropriate
- Present only the most pertinent results
- Arrange in a logical order of progression
Presenting a Poster

- Try to stay by it the whole time
  - Especially for conferences with timed sessions
- Prepare “elevator pitch”
  - 30 second intro to catch attention
- Prepare longer walk-through of entire poster (2 minutes)
- Anticipate questions (practice)
- Smile, have good posture, look interested
- Let your audience go
  - Other posters they want to look at
Additions to Poster

- Provide small handouts of poster
- Have business cards or CVs with you
  - Especially if looking for job
- Provide an envelope for business cards
  - Request reprints or other info
  - Especially if poster hangs “unmanned” for a long time
General Image Processing

- Always analyze unprocessed images
  - For example, when comparing pixel intensities

- For visual comparison, always process all images the same

- Edit scanned images from literature (less common with online journals)
  - Crop and rotate
  - Increase contrast to see text or cover over with own text boxes

- Format data
  - Overlay images
  - Labels and scale bars
Working with Figures

- Schematics, cartoons, flow charts
  - Drawing toolbar in PowerPoint or Word, Paint, CorelDRAW, PhotoShop
  - Use simplest program for your needs

- Chemical reactions
  - ChemDraw, ISIS Draw

- Microscopy images
  - MetaMorph available in microscopy lab
    - Kip Hauch (hauch@u.washington.edu)
    - Add scale bars
    - Overlay images
PhotoShop

- Reformat image type
  - File → Save as
    - jpeg, tiff

- Reformat image size
  - Image → Image Size
    - Document size (%, inches, etc.)
    - Define resolution
    - Gives file size

- More extensive drawing toolbar
PhotoShop Continued

- Edit images (example: protein gels)
  - Add text
  - Crop and rotate
  - Adjust contrast

- Overlay images (example: micrographs)
  - Layers toolbar
    - Establish one image as base
    - Drag other images in as additional layers
    - Change opacity and effects for each layer
    - Edit each layer independently