



CASE WESTERN RESERVE
UNIVERSITY EST. 1826

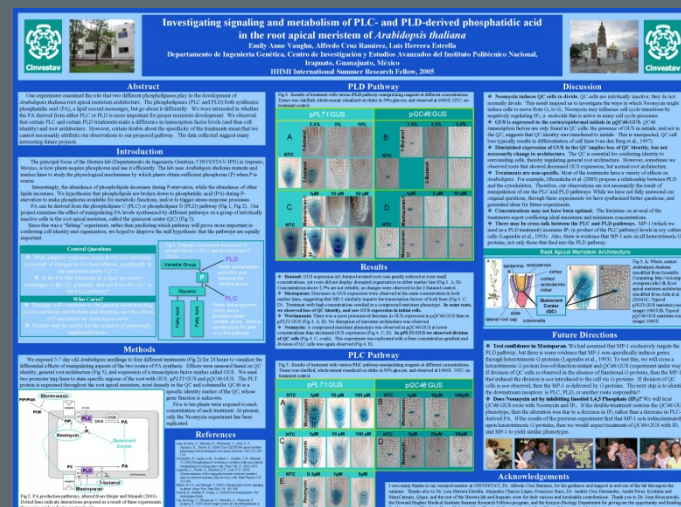
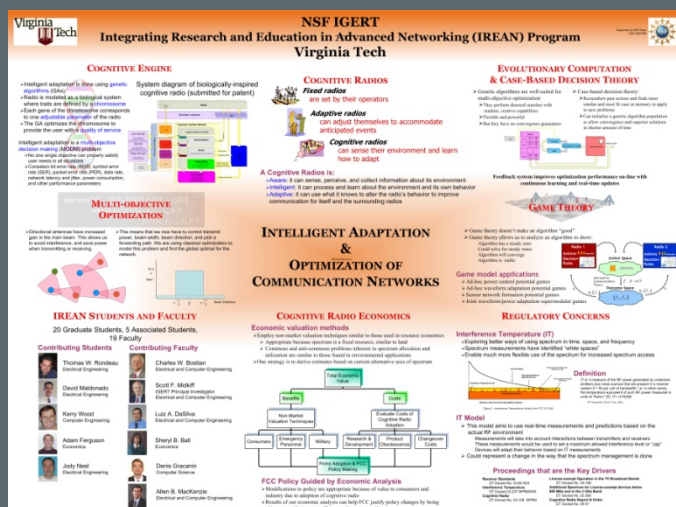
Kelvin Smith Library

Creating the engine to drive the world's
most powerful learning environment.

Making Great Posters for Research Applications

July 2014

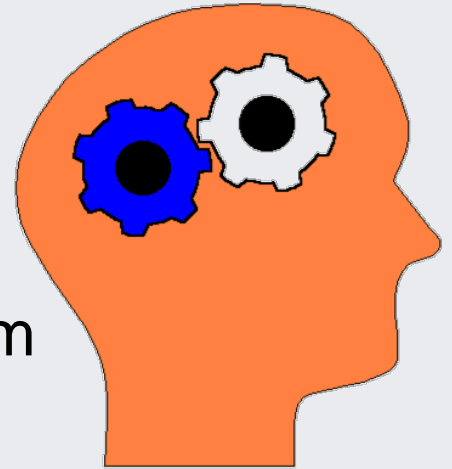
Ann Holstein, Kelvin Smith Library



Purpose

Purpose of a Poster

- To communicate information and ideas
- To outline a piece of work in a form that is easily assimilated
- To stimulate interest and discussion



A Great Poster Is...

Readable

- Easy flow of ideas from one item to the next
- Avoid grammatical errors, complex or passive sentence structure, and misspellings which make a poster "hard to read"



A Great Poster Is...

Legible

- If a text is legible, it can be “deciphered”
- Common errors include:
 - Use of fonts that are too small to be read from 4-6 feet away, the typical distance for reading a poster
 - Poor text color selection

Size:	Arial:	Times New Roman:
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6	Font	Font
7	Font	Font



A Great Poster Is...

Well Organized

- Spatial organization makes the difference between reaching 95% rather than just 5% of your audience
- Time spent hunting for the next idea or piece of data is time taken away from thinking about the science



A Great Poster Is...

and Succinct

- Studies show that you have only 10 seconds to grab and retain your audience's attention
- Make the title prominent
- Keep the amount of text used throughout your poster to a minimum
- Do not attempt to include all the details!

Making a Poster – 2 easy steps!

Designing the Poster Elements

- Most posters are made using some kind of computer software
- We recommend using Microsoft PowerPoint



Printing the Poster

- You can print your poster at KSL, we have large format printers in the Freedman Center
- Library staff will be available to assist you

Give Yourself Enough Time

Time

- It takes time to make a great poster
- Allow yourself 2 - 3 days to design and create your poster
- Last bits of data you rush around to get at the last moment will go completely unnoticed if your poster is messy and disorganized



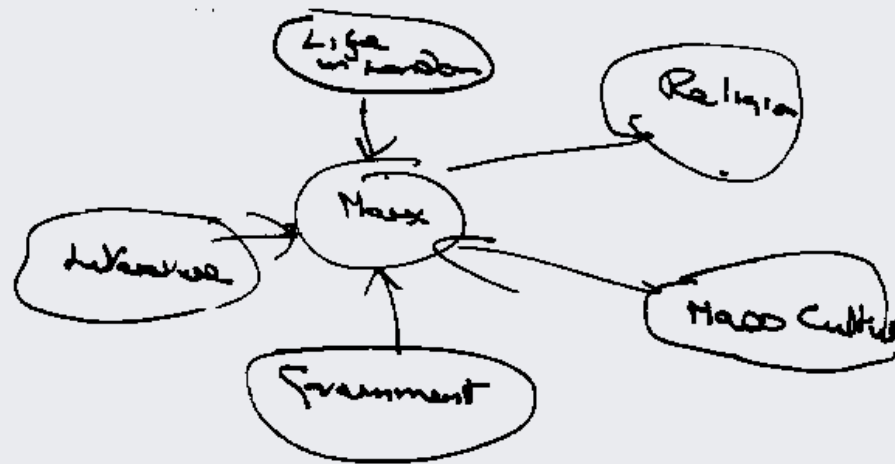
Getting Started



Getting Started

Decide what the Main Message is

- Keep it short and sweet and make this your title!
- Your poster should cover the key points of your work



- Make your poster as self-explanatory as possible
- **Do not attempt to include all the details!**

Getting Started

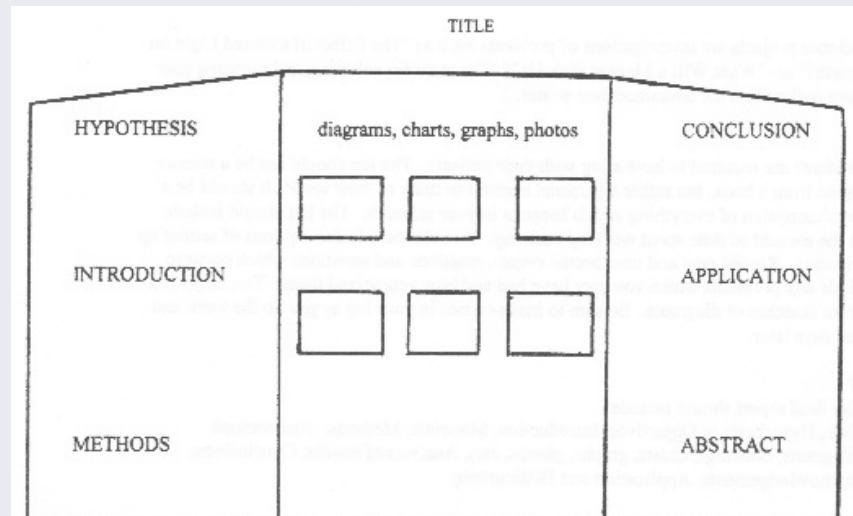
Capture your Audience

- Do not overwhelm the reader with text!
- Main points must come through clearly
- If a detailed explanation is required, prepare a handout of this information
- Include less text, and more graphs, charts and images

Getting Started

Lay out your Images Crudely

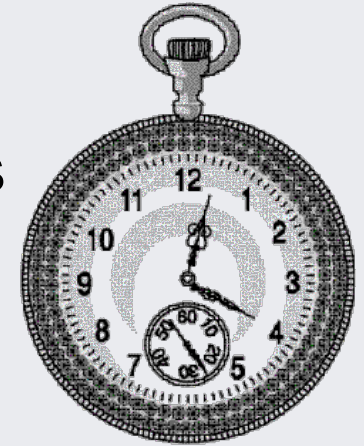
- Before spending time making the final elements of the poster, take pieces of paper that are about the right size and see if you can actually make it all fit physically



Getting Started

ELIMINATE all Extraneous Material

- The average poster gazer spends less than 10 minutes on your work
- You have 10 seconds to trap the viewer before they move on
- Only show data that adds to your central message
- When in doubt, edit out – crowded cluttered posters are difficult and tiring to read

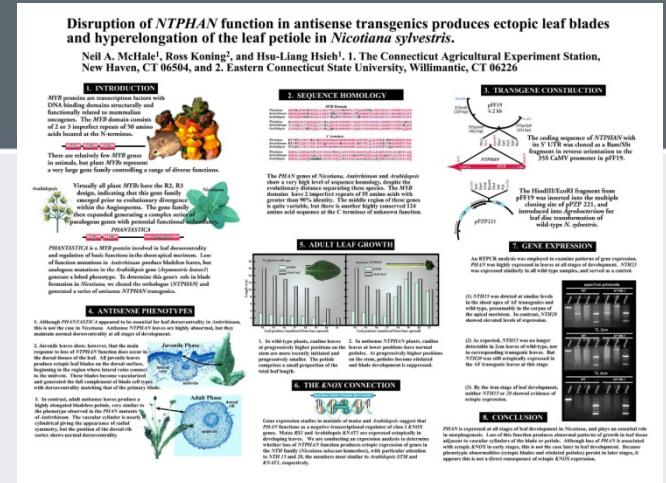


What you DO Need

- Title
- Principal investigators name
- Other authors if applicable and affiliation of each
- Department and school name, addresses of school and other institutions

Additional Items

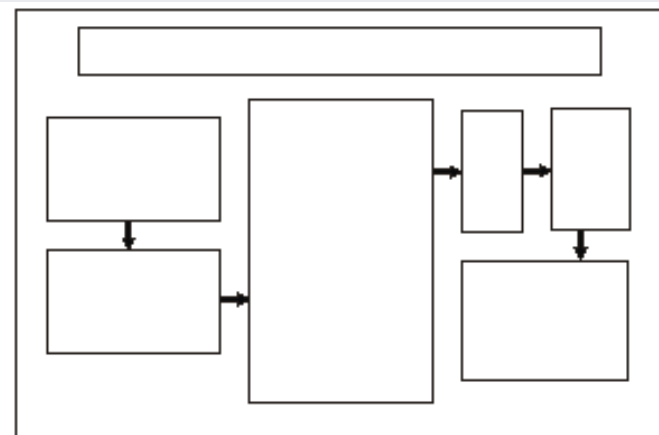
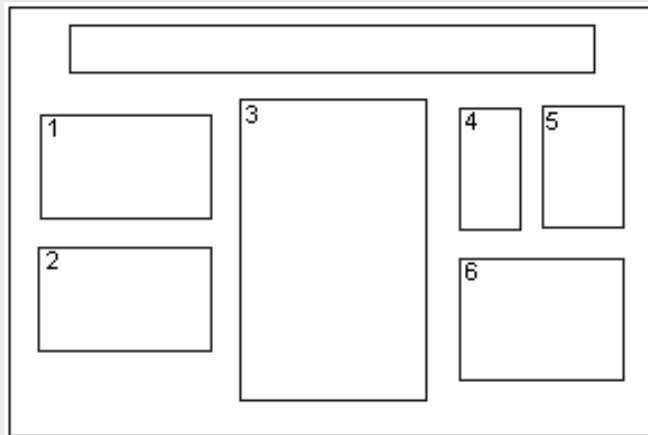
- Abstract, introduction, materials & methods, results, discussion, conclusion, future directions, references, acknowledgements, logos



Poster Layout

Arranging Poster Elements and Text

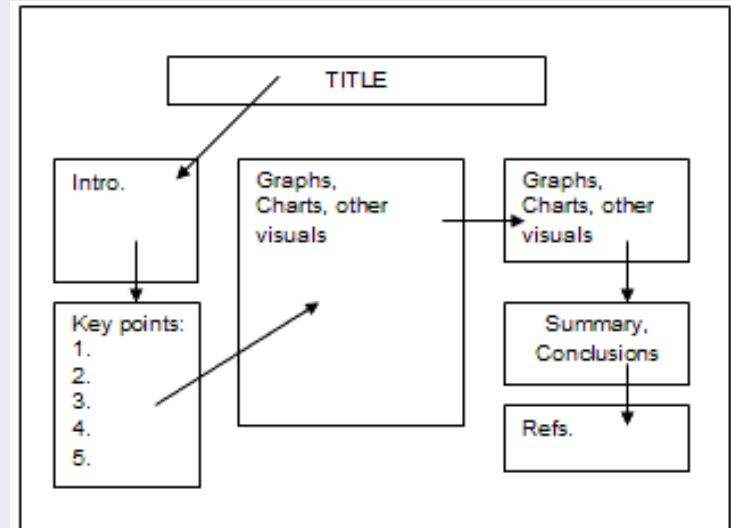
- People approach new information in a known spatial sequence: we track vertically from center to top to bottom, and horizontally from left to right



Poster Layout

Arranging Poster Elements and Text

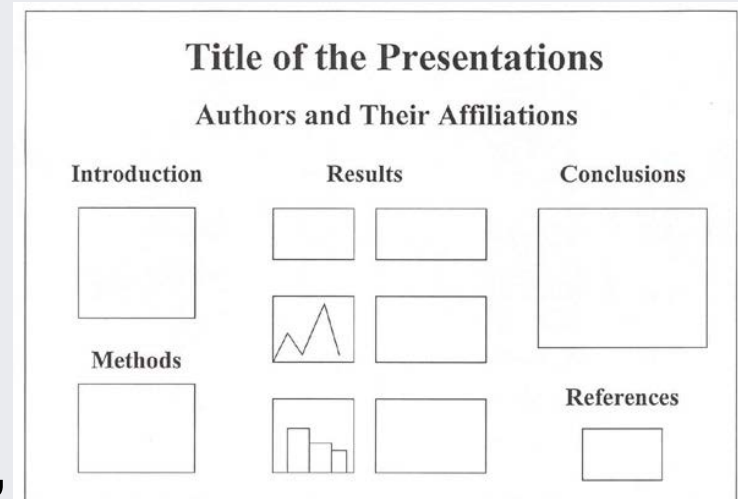
- Put the most important message in the center top position followed by the top left, and finish in the bottom right corner
- In the center top position should be the title and your name so they will be seen in the first 10 seconds that a person looks at the poster



Poster Layout

Arranging Poster Elements and Text

- A poster layout in *columns* is most common.
- Arrange the contents into 3, 4, or 5 columns to facilitate the flow of traffic past the poster
- Organize the material into sections (Introduction, Methods, Data/Results, Conclusions, etc.)
- Use blank space to highlight or offset information



Poster Layout

Space is Important

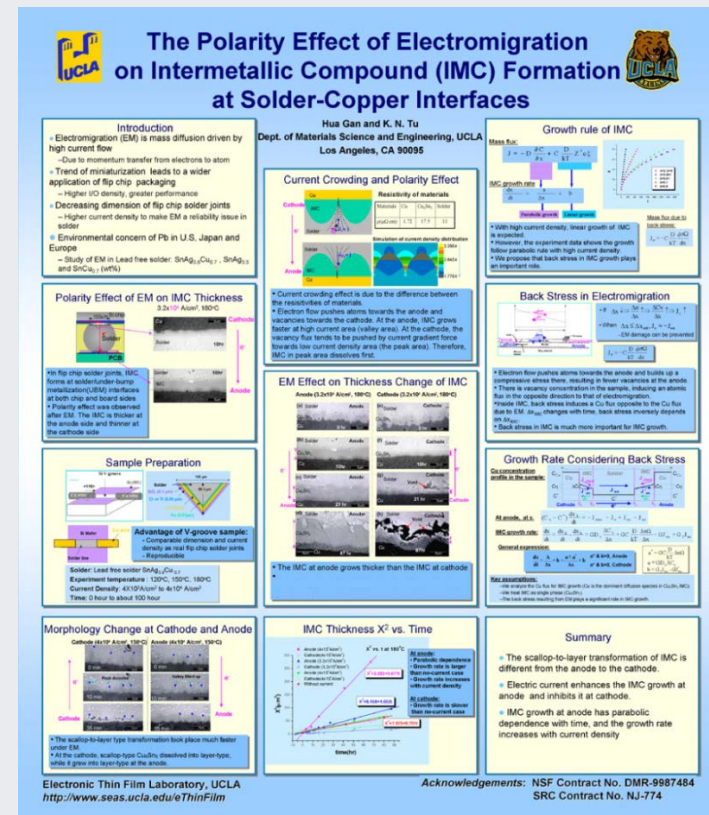
- Without space, your reader has no visual pauses to think
- Allow space between sections and around images
- Leave at least a 1/2 inch margin around all edges of your poster



Poster Layout

Size is Important

- Size of poster elements or the fonts in each element can serve to emphasize the main points
- Making your subheadings in all capitals and two font sizes larger than the rest of the text on the same panel will draw the reader's eye first, and so be emphasized



Font Choice

Font

- Choose a basic font whose "e's" and "a's" stay open at all sizes and that is supported by your printer
 - Arial, Calibri, Helvetica, and Tahoma are good choices
- Avoid use of multiple fonts which can be distracting

FATSO DEVON NATIVE
Catchup Expose Heidleberg
IRONWORK ASIA TEMPLETT

Lathedral GAUSS RUBBER STAMP
celtic SPIKE Beau Amaze
Borghs Cracked Southwestern
ELIZABETH Wright Bart BIG NIB

EDDY'S BONES PLANK Cracked
CREEPY Blur CHOCOLATE
COFFEE SACK FLOWER POWER
Lathedral GAUSS RUBBER STAMP
celtic SPIKE Beau Amaze
Borghs Cracked Southwestern
ELIZABETH Wright Bart BIG NIB
FANZEE Oak Ridge NEW YORK
Lauren DECO Parisian Crane
FATSO DEVON NATIVE
Catchup Expose Heidleberg
IRONWORK ASIA TEMPLETT
Cocoa Billboard DAVIS
GREMLIN Brando EXPLO

Font Choice

Size

- Font sizes need to be big to be effective
- You should be able to easily read it from 4-6 feet away
- Test this by viewing a portion of your poster on your computer
 - Zoom in to 100%
 - Step back from your monitor to see if you can still read it

Size:	Arial:	Times New Roman:
1	Font	Font
2	Font	Font
3	Font	Font
4	Font	Font
5	Font	Font
6	Font	Font
7	Font	Font

Font Choice

Size

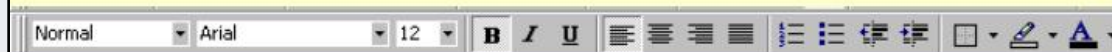
- Recommended **Minimum** Font Sizes
 - Title: 60 point bold
 - Researchers and affiliations: 48 point
 - Section headings: color of your choice, 30 point bold
 - Text: black, 24 point
 - Figure, graph and table captions: black, 20 point
 - References and acknowledgements: black, 20 point
 - Photo/image credit: black, 14 point

Formatting

Format

- DO NOT use single spacing!
- Indents set text apart and are great for short lists
- Justify text
- Use bullets to illustrate discrete points

Formatting Toolbar



The **Formatting Toolbar** is a collection of buttons that makes it easy for you to do simple formatting that changes the appearance of your document.

Images, Graphs, and Tables

Images

- The same or more space on the poster should be taken up by images or graphs than by text
- A good rule of thumb is 30% text, 40% graphics 30% empty space

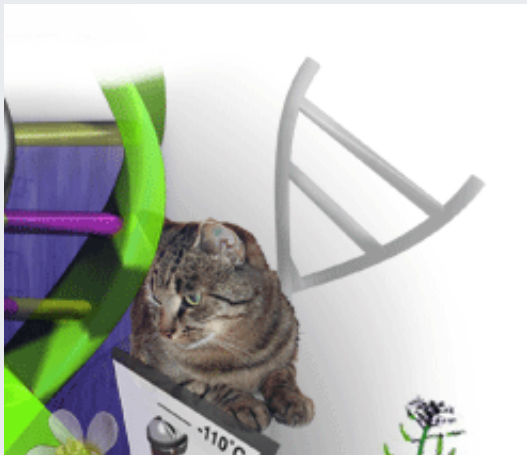


Figure 1. Feline DNA

- Use of color in your graphics will enhance your poster
- Don't forget to include explanatory captions on your poster

Images, Graphs, and Tables

Images

- Photos and drawings should be of sufficient size to be visible from a distance
- 4" x 5" photos are a good size
- Drawings are best if at least 8" x 10"
- Place related materials (e.g. photo with accompanying text) close together, then offset it by surrounding it with blank space

Images, Graphs, and Tables

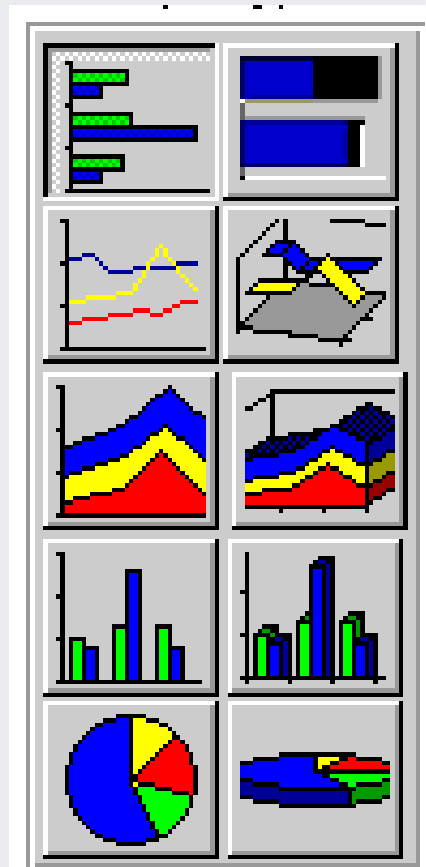
Images

- Your images should have a resolution of at least 300dpi (dots per inch) at the size they will be ultimately printed on your poster
- Save them as either JPEG (or JPG), or TIF files
- Avoid using BMP & GIF files
- In PowerPoint go to the **Insert**, then **Picture**, then find your image
- You can adjust both the size and position of your image in PowerPoint

Images, Graphs, and Tables

Graphs

- When importing graphs from Excel or other software, copy the graph then go to the **Home** menu, **Paste Special**,
as **Picture (Enhanced Metafile)**
- Avoid complex graphs and tables with excessive numbers
- Use colors to distinguish different data groups in graphs
- Avoid using fine patterns



Images, Graphs, and Tables

Tables

- If you do use a table on your poster, it should be very compact
- Use a table only if it would support your story more efficiently than a graph

Table 4: Installed R_{peak}

TOP500 Statistics — Installed R_{peak} [Gflop/s]					
	USA/Canada	Europe	Japan	others	Total
SGI	18895	6885.8	625.6	277.2	26683
IBM	9563.8	3756.3	258.1	57.0	13635
Sun	2628.1	787.1	234.4	177.0	3826.6
Hewlett-Packard	1745.5	496.5		46.1	2288.0
Fujitsu	48.4	620.8	1370.6	28.6	2068.4
NEC	256.0	248.0	842.0	64.0	1410.0
Hitachi		77.0	3200.0		3277.0
others	4244.8	137.6	125.1		4507.5
Total	37381	13009	6655.7	649.8	57696

Mannheim/Tennessee

June 10, 1999

Add Color

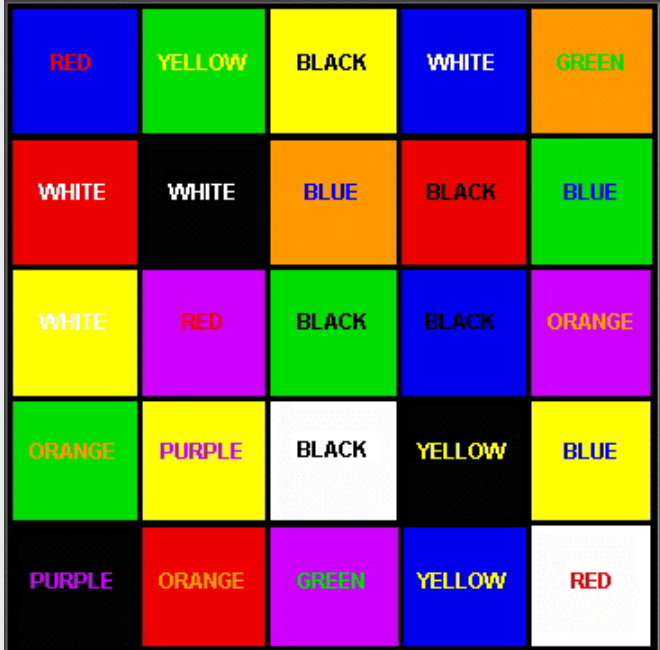
Color & Contrast

- Proper color contrast will reduce eye strain and make the poster more legible and interesting visually
- Be careful that the color does not outclass the visual impact of your data
 - Too much contrast is hard on the eyes and can distract the reader from your data
- Use color for highlighting and to make your poster more attractive

Add Color

Color & Contrast

- Do not go overboard with color
- Avoid patterns or motifs
- Dark background colors are ok, but KSL will charge an additional fee
 - \$5 48" or shorter
 - \$10 over 48" long



RED	YELLOW	BLACK	WHITE	GREEN
WHITE	WHITE	BLUE	BLACK	BLUE
WHITE	RED	BLACK	BLACK	ORANGE
ORANGE	PURPLE	BLACK	YELLOW	BLUE
PURPLE	ORANGE	GREEN	YELLOW	RED

Save your Poster

Saving

- Save the poster as a PowerPoint Presentation or Adobe .pdf only!
- Other save options (.gif, .jpg) will reduce the quality of your poster

Before You Print

Final Check

- Have some people look over your poster before you print
 - Research advisor
 - Peers
 - Friends & family
- If they are confused, it is far better to fix it now than to lose people at the poster session
- Pay particular attention to things that may not be necessary: eliminate everything that you can!



Before You Print

Test Print

- Print your poster on regular letter paper to proof read it
- Go to the **Print** option. In the pop-up window, select the **Scale to fit paper** box, and set the paper size to **letter (8.5x11in.)** and **landscape** mode
- Do NOT change any of the other settings!
- After printing, you can tell that the font sizes are right if you can still read the text

Printing

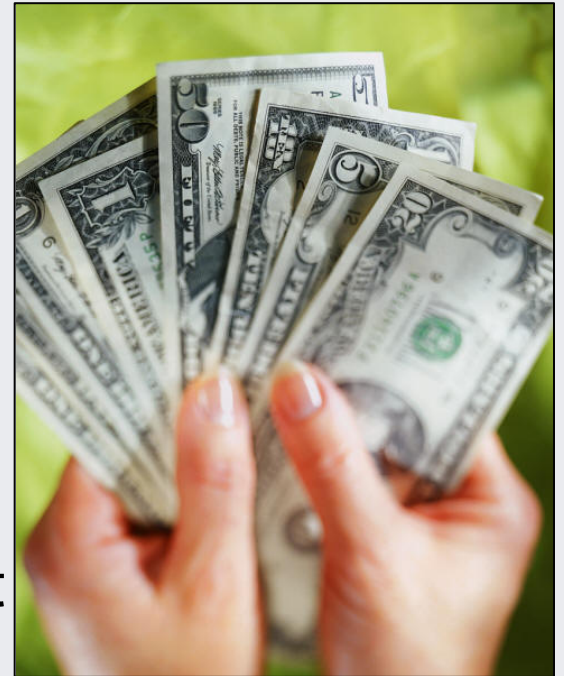
KSL

- If you decide to print your poster at KSL, you can either make an appointment or use the drop-off service (48-hr turnaround)
- <http://library.case.edu/ksl/freedmancenter/poster/>

Printing

Costs

- Poster printing costs at the Kelvin Smith Library (KSL) for gloss or semi-gloss poster paper
 - < 42" in length = \$25
 - 43-48" in length = \$35
 - 49-56" in length = \$45
 - 57-68" in length = \$60
- You may be charged \$70 or more if you print it elsewhere
- Check to see if your department is covering the printing cost



Printing

Other Campus Printing Options

- Plain paper color poster printing: **Student Activities and Leadership.**
- <http://studentaffairs.case.edu/activities/services/poster.html>
- High quality poster printing: **Campus Printing Services.**
- <http://www.case.edu/finadmin/auxserv/printsrv/poster.html>

Poster Session

Brief Presentation

- You may wish to prepare a short presentation of about 3-5 minutes that you can periodically give to those assembled around your poster

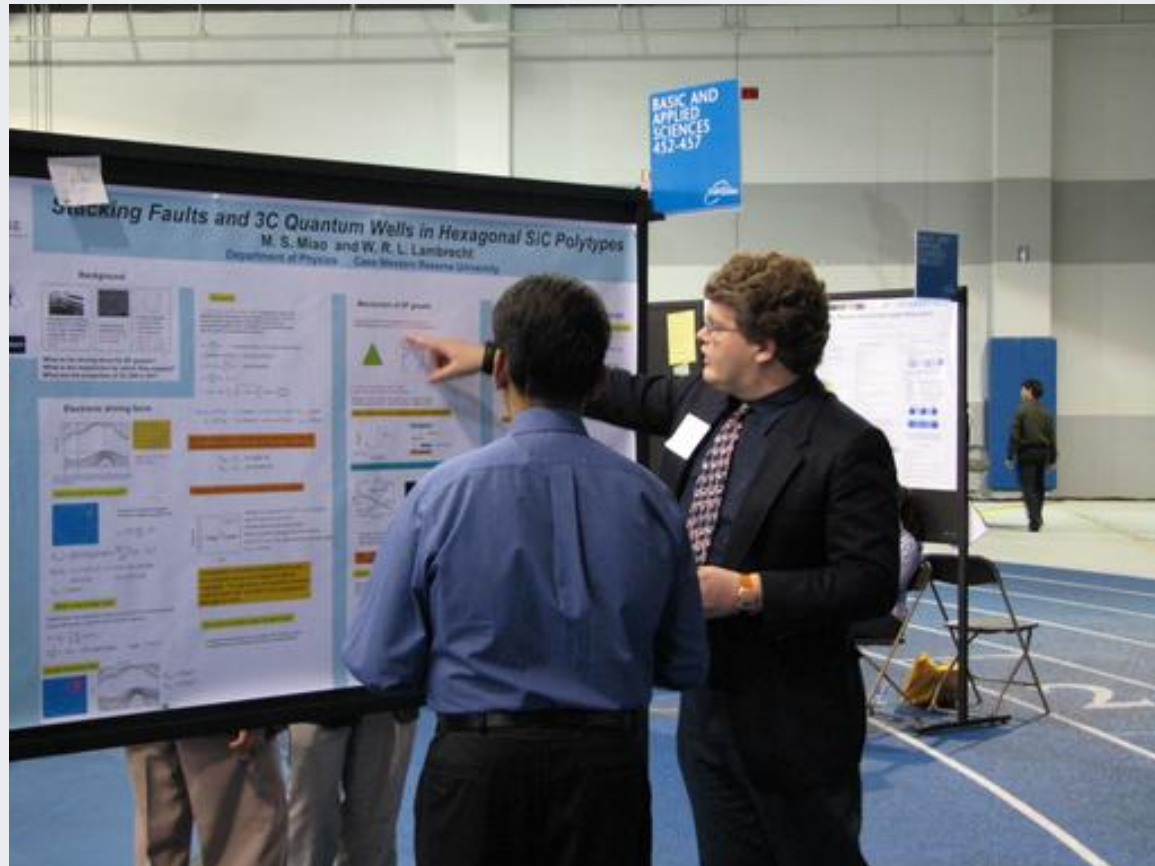


Poster Session

Have Fun!

- Good luck and have fun making your poster and showing it
- Displaying your finished work is a big accomplishment so take time to enjoy it and your interactions at the poster session
- Be on time and enthusiastic about showing your poster – this is your chance to advertise yourself and your work!

Poster Session



Thank You!