Today's Agenda

• Posters and Poster Sessions
• Design Concepts and Fundamentals
• Tosney’s Eleven
• Examples
• Software
What is a poster?

• Formal presentation of research results
  – Single board
  – Provides a narrative of your research
  – Communication through concise text and graphics
Poster Session

• Exhibition-style Presentation
  – Author stands with poster
  – Conference attendees walk by and observe
  – Informal conversations with author/researchers
Poster Session: AAG
Example Description I

• Posters are exhibited for informal browsing with opportunities for individual discussion with poster authors
• 30 to 40 posters per session
• AV consists of 4’ x 8’ poster boards only
Use the poster format for your presentation when your material can easily be communicated visually. Each presentation should make a unified, coherent statement. Materials, both textual and visual, should be of professional quality and be clearly legible from a distance of four feet (4’). Graphic materials should be displayed on a 4’ x 8’ poster board supplied by the AAG. Text should be limited to brief statements. Presentations consisting mostly of text are most appropriate as paper presentations.
When at a poster session...

• Arrive Early
  – Often spaces are not assigned
• Not only is the poster on display – you are
• Make sure you wear your nametag
  – Make sure it matches your poster
• Chat with friends only if no one is at your site
• Have some business cards with you
• Stay through the entire allotted period
Sharing Your Work: Poster vs. Paper

**Poster Session**
- Long presentation (sits for hours)
- Can assimilate material
- Interaction with active audience
- Well-suited for maps, tables, and photographs
- Less intimidating
- Perhaps better for complicated or esoteric presentation
- Two-directional

**Paper Presentation**
- Short Presentation (~10-15 minutes)
- Graphics go by quickly
- Few questions
- More formal comments
- More intimidating
- More prestige
- One-directional
Layout and Design
Layout: Size and Orientation

• Size will vary, follow specs defined for you
  – In 11.520, posters must be 24”x36”
• Usually with a ‘landscape’ orientation
Layout: Title

• Make title large enough to read from 15-20 feet
• Consider using 72-84+ point font size
• Include
  – Your project title
  – Researcher names
Layout: Column Orientation

- Have readers work up-down and left-to-right
- Readable from 3-5 feet
Layout: Marginalia

• Add sources, credits, affiliations, bibliography, and other supplemental information
• Keep healthy amount of white space
Layout: Stay on the Grid

• Alignment is important and professional
• Keep consistent margins
• Use a grid to design your layout and assist with balance and design
General Guidelines I

Sizing and Images

• Base poster design on given specifications
  – Do not vary size, or scale elements to fit after designing

• Design for distance reading
  – Title: 15-20 feet
  – Rest: 3-5 feet (comfortable standing distance)

• Use illustrations
  – Well-selected; Well-produced
  – Some complexity is OK

• Background images
  – Keep them under control
General Guidelines II
Text and Timing

• Use minimal text
  – Poster is not a replacement for a paper
  – Use of terse phrases is more than acceptable, in fact, desired
  – Short declarative sentences

• Timing goals:
  – Basic concept: 60 seconds
  – All text: 1-2 minutes
  – All illustrations: 3+ minutes
    • “savor” illustrations, not prose
General Guidelines III
Provide a Narrative

• Take readers through your poster
  – Left to Right
  – Readers should have no chance of getting “lost”

• Design a poster like a map
  – Establish a distinct visual hierarchy
  – Use fonts and type sizes carefully
    • Part of the visual hierarchy

• Think of alignment and balance
  – Align elements to communicate a clean, clear message
General Guidelines IV
More on text...

• Use type wisely
  – Use 2-3 typefaces at most
  – Consider using sans-serif for headers and title (bold)
  – Consider using serif for text

• Avoid long lines of text
  – Stay succinct!
  – Sometimes long text unavoidable, try to limit
  – Try to limit lines of text to 8-10 words

• Use “white” space
  – Have sufficient margins

• Be especially wary of typos
General Guidelines V
More on graphics...

• Avoid Pixelation
  – Be wary of screenshots
  – “Import” or “Place” your images

• Images should be a minimum of 120-150 pixels
  – Based on your final poster size

• Print a test copy
  – Check colors, fonts, images, etc.
DUSPviz Favorites:
Sans Serif Fonts

Arial
Calibri
Eurostile
Franklin Gothic
Gill Sans
Helvetica
Lucida Sans
Myriad Pro Bold
Swiss 721
Condensed
Swiss 721 Black
Condensed
Verdana
DUSPviz Favorites:
Serif Fonts

Cambria  Garamond
Baskerville  Times New Roman
DUSPviz Non-favorites

Brush Script

Comic Sans
Huge collection of Resources

Fonts, colors, design

http://duspviz.mit.edu/resources
Eleven Ideas to Keep in Mind

• Kathryn Tosney
  – [http://www.bio.miami.edu/tosney/file/PosterHome.html](http://www.bio.miami.edu/tosney/file/PosterHome.html)

• These eleven ideas show...
  – How to emphasize your message
  – How to not obscure your message
1. Design for Three Audiences

- **Workers in your general area**
  - Main audience
- **Workers outside your area**
  - A “bonus” audience
- **Rabid competitors**
  - Not your audience
  - They will attend no matter what
  - Don’t design your poster exclusively for your competitors
2. Layout Column format left to right

- Organized in **columns**, viewers can read all of a column before they move.
- Organized in rows, viewers must fight their way back to the beginning once they finish a row.
3. Indicate the sequence

- Use
  - Logical Sequence
  - Numbers
  - Letters
  - Arrows
4. Use visual grammar

• **Use type size proportional to importance**
  – Largest type: title (72-84+ points)
  – Next largest type: section headings
  – Medium type: supporting material
  – Smallest type: details
    • Use no smaller than 14-18 points

• **Show, don’t tell**
  – Graphics should dominate the poster visually
5. Emphasize essential information

• Be explicit
  – Headings should emphasize the experimental logic
    • “Results” – No
    • “Transgenics grow extra feet” – Yes

• Emphasize the message, not the categories
  – Go beyond merely identifying meaningless categories like “Results” in section headings.
6. Emphasize visually

• **Think graphically**
  – Use graphics, cartoons, and figures instead of text
  – A picture is worth a thousand words

• **Make graphics visually accessible**
  – Use graphs and table formats that portray the data without reference to extensive keys
7. Avoid visual distraction

- **Group associated elements visually**
  - Make each panel similar in size and shape

- **Choose your emphasis**
  - Use color conservatively, for emphasis
  - Use color consistently, e.g. color code an item and use the same color for it throughout, in figures and graphs
  - Choose a muted or neutral background color that doesn’t attract attention away from the graphics and text
8. Make Text Readable

• Readability criteria
  – Title and major headings – readable from afar
  – Supporting material – readable from 4 feet
  – Details – readable from 3 feet
    • Keep to a minimum, edit vigorously

• Hints
  – Keep text compact
  – Use serif-style fonts
  – Use left-justified text, avoid right-justification
  – Use both upper and lower case
9. Differentiate data, summaries, and conclusions

• **Commit yourself**
  – Summaries merely restate results
  – Conclusions interpret the results and identify their significance

• **Be bold and explicit**
  – Make the strongest statements your data will support
  – Make the title as explicit as you can
10. Keep it Simple

• Edit ruthlessly
• Simple messages are memorable
• Mock-up your poster then ask which details you can dump
  – If you can omit it, omit it
• Edit all text to simplify verbiage, to reduce sentence complexity, and to delete details
11. Use Graphics when you Talk

• Don’t read your poster: use it as a visual aid
  – Use the graphic elements to explain your work
• Have a 5-minute talk & 2-minute synopsis
  – Practice using your poster to give a 5-minute talk
  – Be able to give a quick 2-minute synopsis
  – Practice handling questions mid-stream
    • Unlike a paper, your audience will interrupt
Examples
Bad Examples
In the middle...
In the middle...
Good Examples

Visualizing the Impact of a Just Cause Eviction Ordinance in Boston

Context and Question
Modern Right to Remain Ordinances, comprised of nearly the same language, have been enacted in many cities across the United States. These laws require landlords to justify evictions and prevent unlawful evictions. In addition, the lack of data on the residential eviction landscape in the United States makes it difficult to understand the impact of the laws. Chapter 2 of the ordinance is designed to address these eviction data gaps.

The Data
We obtained the data from the City of Boston for the years 2011-2015. We used a combination of data from the City of Boston’s Evictions and Landlord Foreclosures Division, the Boston Housing Authority, and the Boston Citywide Eviction Data System.

Combining the Factors: Raster Map Algebra

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Characterizing the Flammability of Cardboard Using a Cone Calorimeter

K.J. Overholt1, M.J. Goliner1, A.S. Rangwala1
Worcester Polytechnic Institute
University of California, San Diego

1. The importance of carbon in large-scale fires.
2. Experiments set up for studying cardboard flame spread.
3. A dimensional parameter: The B number approach.
4. Predicting flame heights using the dimensional flame spread model.

Increasing Accessibility to Farmer’s Markets in Jamaica Plain

Mia Goldwasser and Lisa Young

Food Access and Community Resilience

Project Questions
- What percentage of adults in Jamaica Plain do not access food stamp benefits?
- How accessible are farmer’s markets to residents?

Food Stamp Recipients in Jamaica Plain

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Good Examples
Software
Software

• Many Options
  – Adobe InDesign
  – Adobe Photoshop/Illustrator
  – Microsoft Powerpoint
  – GIMP/Inkscape
  – Etc.

• Learn new software if necessary

• Import and Place, do not copy paste or take screenshots. (avoid pixelation!)
11.520:
Your Posters and Presentations
11.520 – Poster

• Due day of presentation (hard copy AND digital copy)
• 24” x 36”
  – Emphasize your final project question and answer
    • Include a selection of your most important maps and charts
  – Glossy, high quality print (Use plotter!)
• Include (at a minimum)
  – Introduction/Context
  – Your Spatial Question
  – Data
  – Methods
  – Findings/Conclusions
  – Limitations/Future Work
• Pin up your posters
  – Poster session with guest reviewers before presentations begin
11.520 – Presentation

• We will assign time slots next week
• Approximately 15 minutes
  – 10 min presentation, 5 min QA
• 10-15 slides (based on approximately 1 min slide)
• Presentation should include logical intro, spatial question, context, data, methods, and conclusion
• Tailor your presentation to new viewers who know nothing of your project
Clear Design Starts with Clear Thinking

“If my viewer carries away only one idea, what do I want it to be?”

Your answer is the focal point of the poster, and your narrative should lead to this
if your poster has tiny text and has 20 colors

you're gonna have a bad time