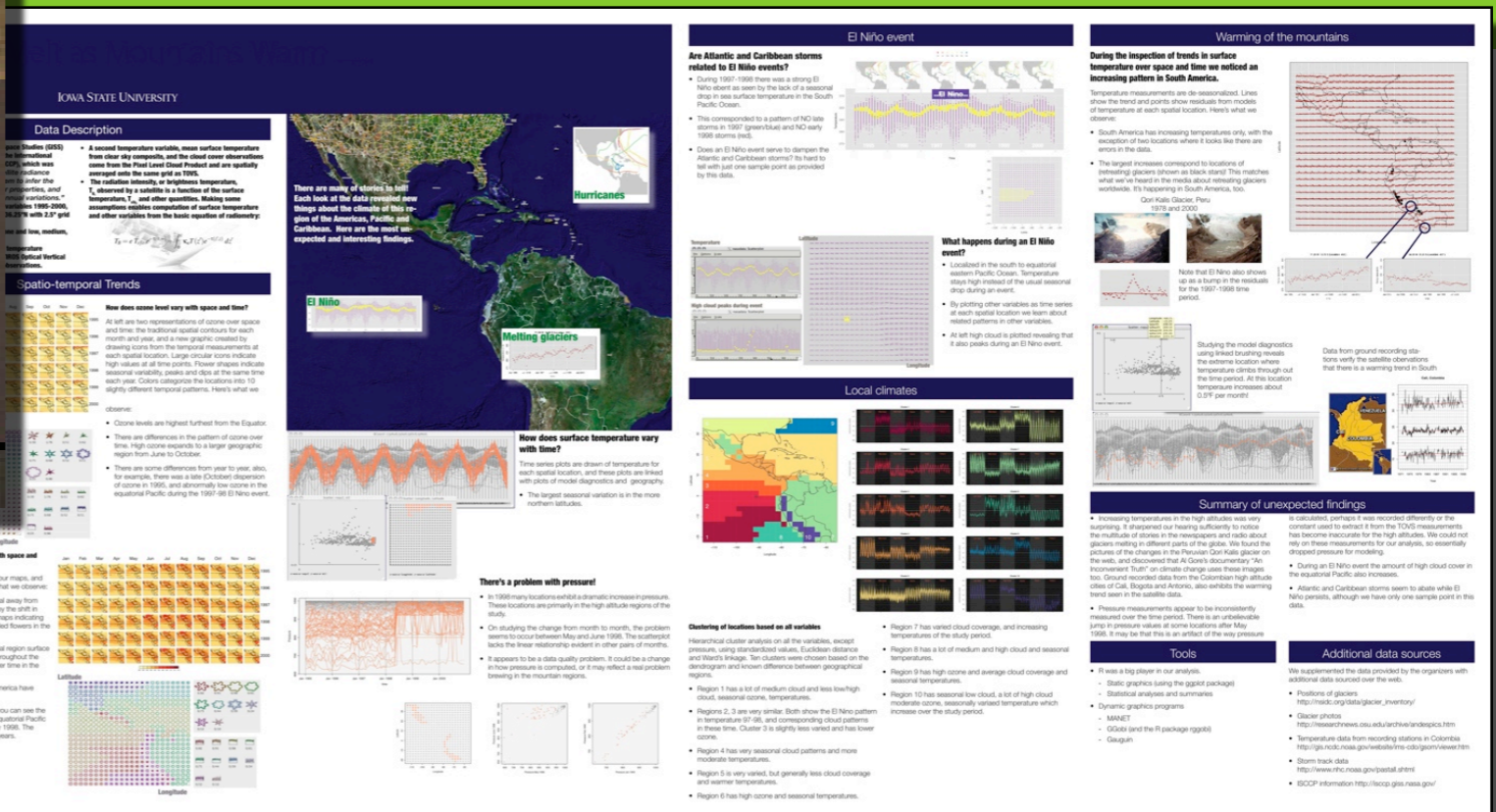
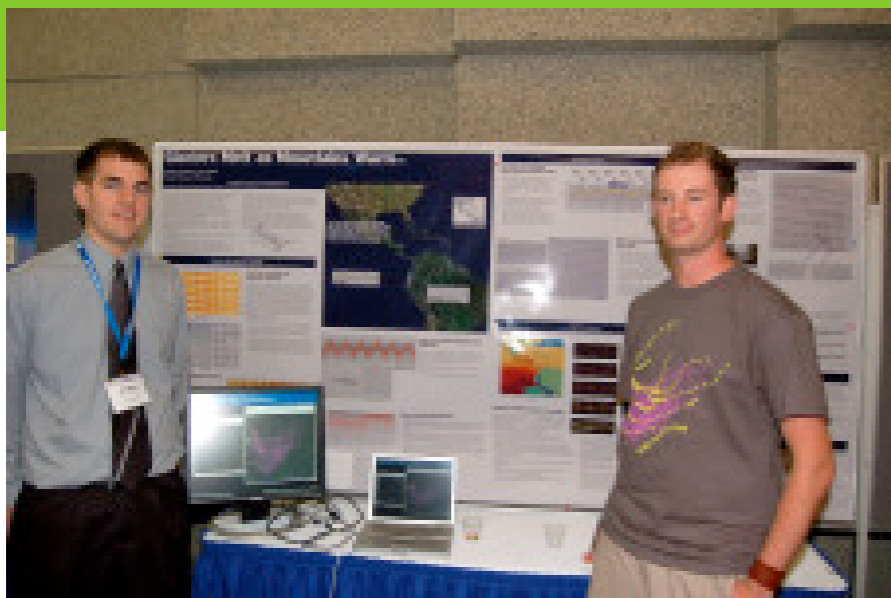


# Improving Statistical Posters

Di Cook  
Iowa State University

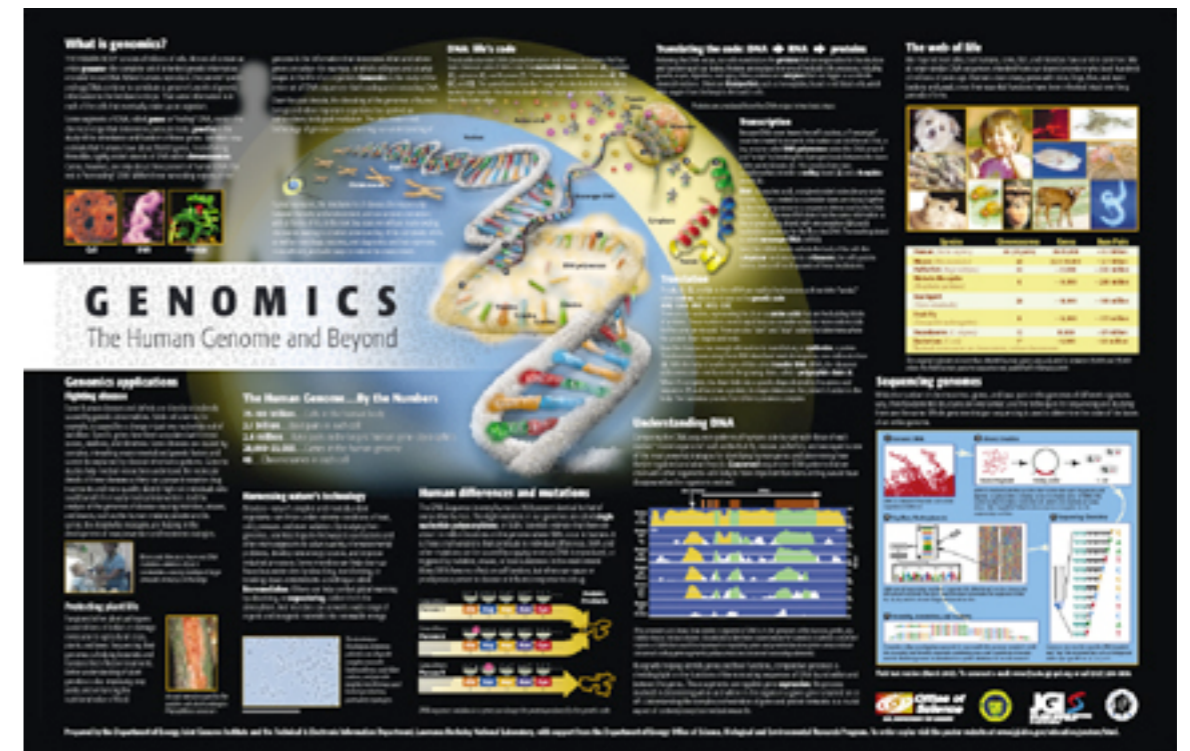


Presentation  
prepared for  
JSM'07

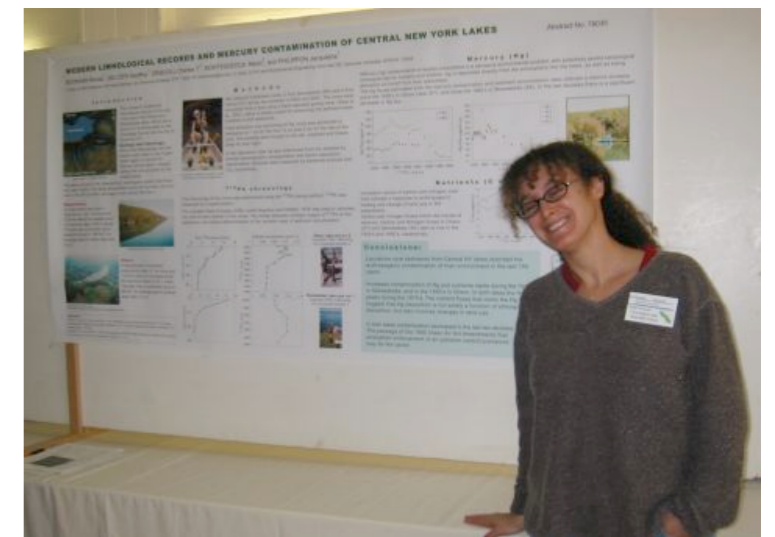
[dicook@iastate.edu](mailto:dicook@iastate.edu)

# OUTLINE

- 🌻 Planning
- 🌻 Layout
- 🌻 Color
- 🌻 Text and font
- 🌻 Visuals
- 🌻 Electronic media
- 🌻 Resources



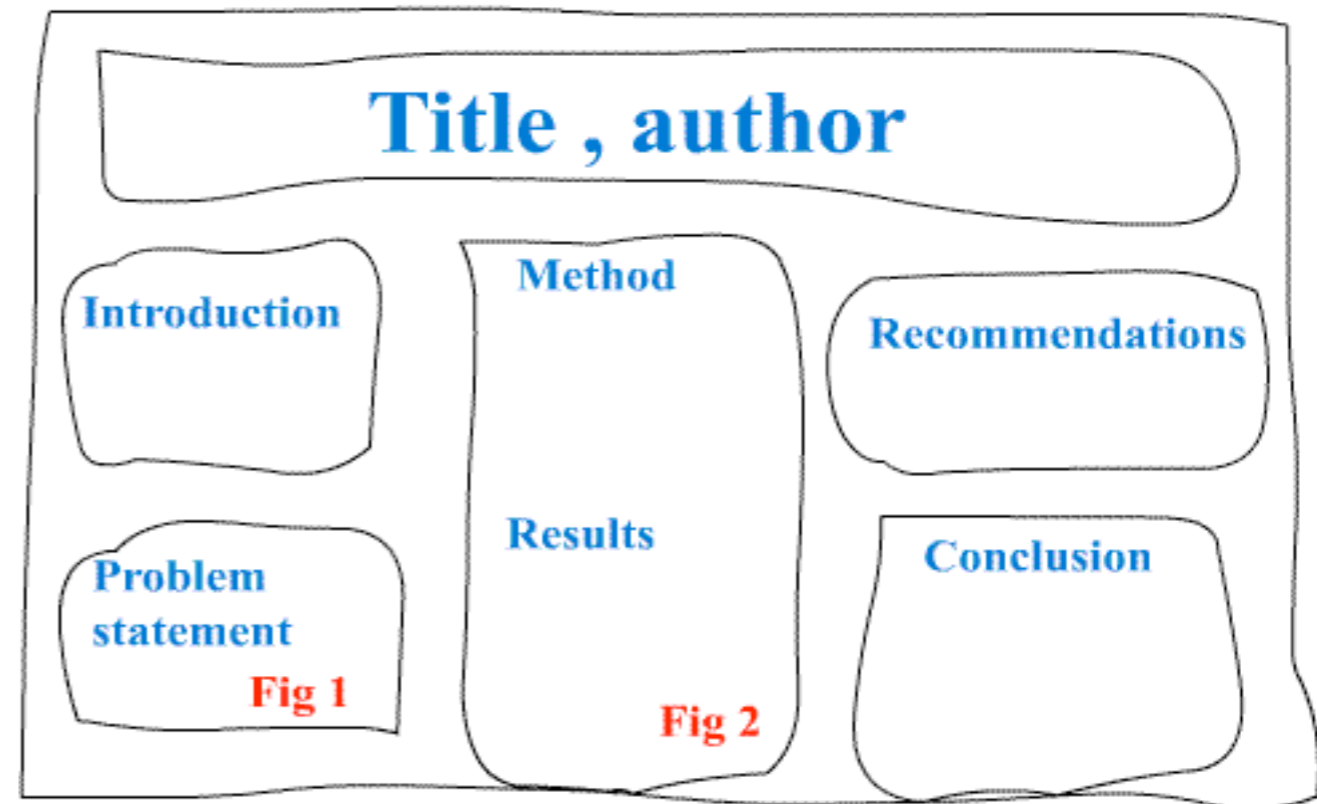
[http://www.lbl.gov/Publications/Currents/Archive/images/Apr-04-2003/genomics\\_poster.tiff.jpg](http://www.lbl.gov/Publications/Currents/Archive/images/Apr-04-2003/genomics_poster.tiff.jpg)



Bookman et al [http://www.upstatefreshwater.org/html/olsf-sixth\\_posters.html](http://www.upstatefreshwater.org/html/olsf-sixth_posters.html)

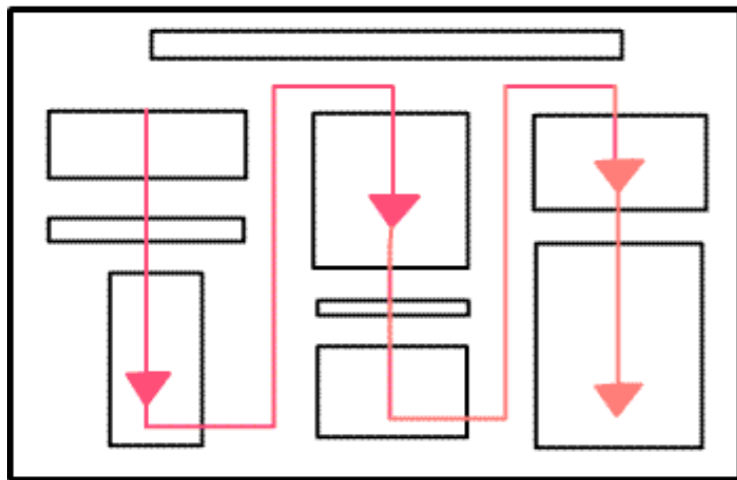
# PLANNING

- ✿ Write down everything: Title, Introduction, Problem Statement, Method, Results, Recommendation/Conclusion
- ✿ Plan attention grabbers - you have less than 3 seconds to grab people's attention.
- ✿ Sketch out your poster
- ✿ What's the message?
- ✿ Who's the target audience?

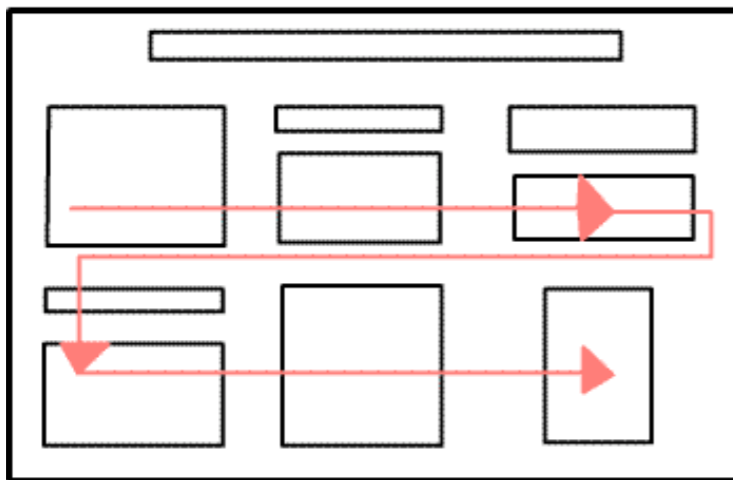


# LAYOUT

By column



By row



A numbering system will help your audience follow the flow of information.



Print the pieces at actual size and place them on a table.

# COLOR



Color is a very important part of your poster.



Choose a color theme.



Too much color makes it too busy.



This combination is easy on the eyes.



This combination is also easy on the eyes.





This combination is NOT easy on the eyes.




This combination is NOT easy on the eyes.

# TEXT & FONTS

 Text size and font are very important.

 ALL CAPITALS CAN BE DIFFICULT TOO.





 **Ariel bold is easy to read.**

 Courier regular is NOT easy to read, and is boring.

 *Italics and script is NOT easy to read.*

Title	100pts	>1.5in
Headings	~50pts	0.6-0.8in
Body	>25pts	0.2-0.4in

# VISUALS

-  Graphics, photographs and diagrams are a vital part of a poster. They add interest and help communicate your message.
-  Use digital photos rather than scanned.
-  Create graphics using good plotting software such as R, and edit/annotate using a drawing program such as Photoshop, Canvas, CorelDraw.
-  Use sparingly to avoid a busy appearance.

# CREDIT



<http://www.lib.uct.ac.za/infolit/poster2a.htm>  
is the source of my material to this point.



Really excellent, straight forward advice  
with pictures and diagrams on poster  
construction.

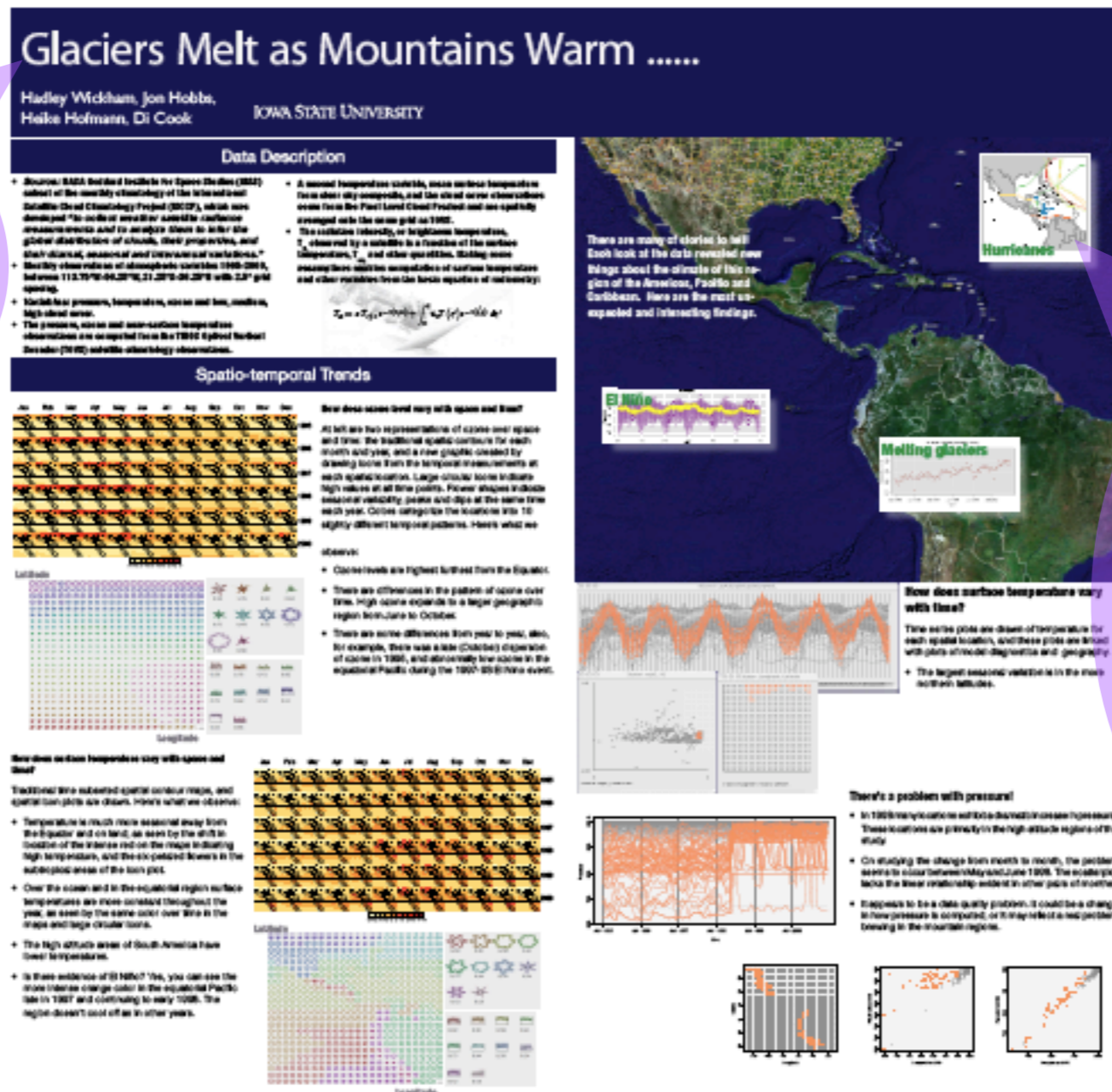


# EXAMPLE

4'x4'

Catchy title

Navy and white color scheme



Dramatic visual, which also serves as lookup to the main parts of poster.

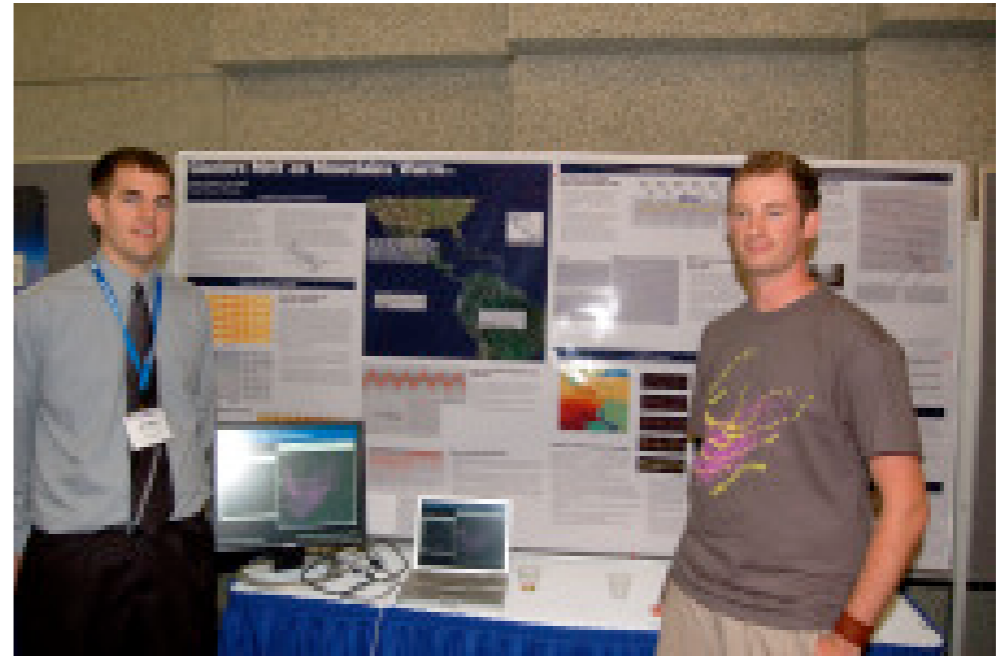
# MULTIMEDIA SUPPLEMENTS



A movie or computer demo can illustrate the dynamic rather than static nature of your work.



Multimedia draws attention.



Interactive graphics used  
in the production of  
“Glaciers melt as mountains warm”

Hadley Wickham, Jon Hobbs,  
Di Cook, Heike Hofmann

# MULTIMEDIA SUPPLEMENTS



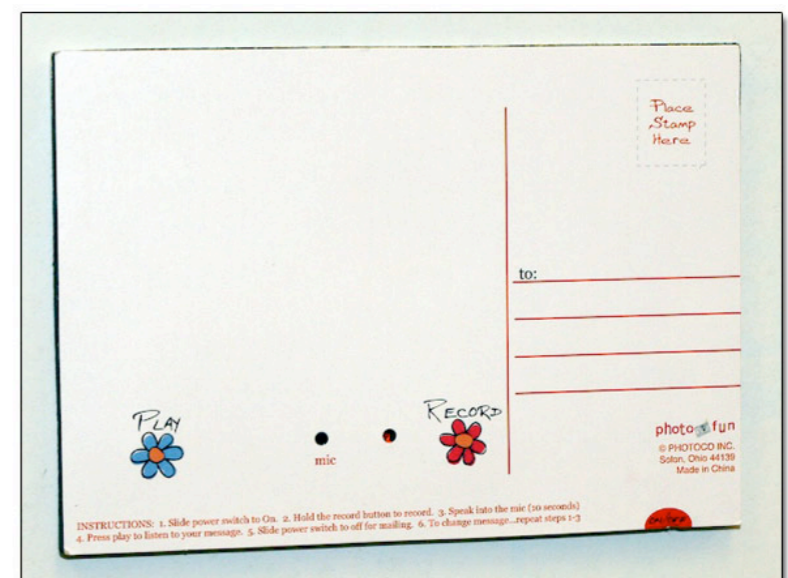
A digital photo frame might be incorporated directly into your poster to display a sequence of photos or graphs.



[http://blog.scifi.com/tech/archives/2006/10/13/new\\_memoryframe.html](http://blog.scifi.com/tech/archives/2006/10/13/new_memoryframe.html)





A recordable postcard can be used to add sound!



<http://www.swarthmore.edu/NatSci/cpurrin1/images/soundrecorder.jpg>



# DATA EXPO POSTERS

 The ASA Statistical Graphics section sponsored a data analysis and poster presentation competition for JSM'06.

 Good place to see examples of well-constructed posters and multimedia supplements.

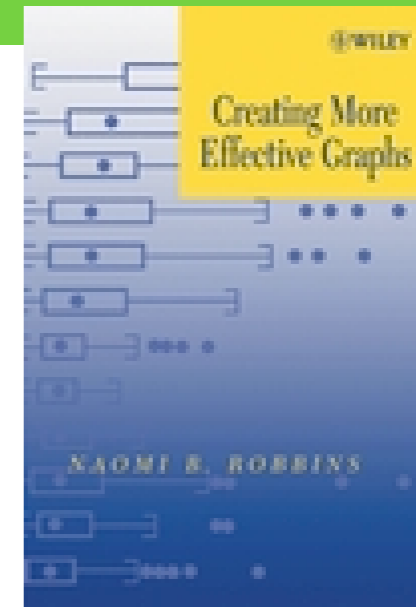
<http://www.amstat-online.org/sections/graphics/dataexpo/2006entries.php>

# SOFTWARE

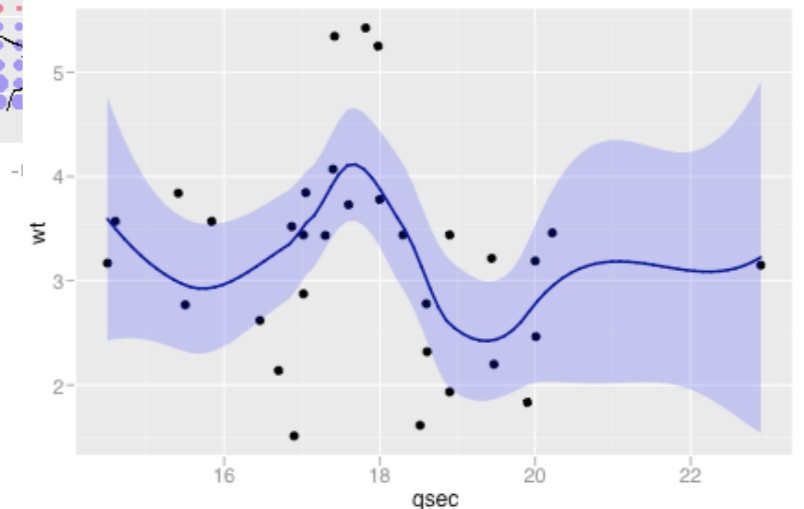
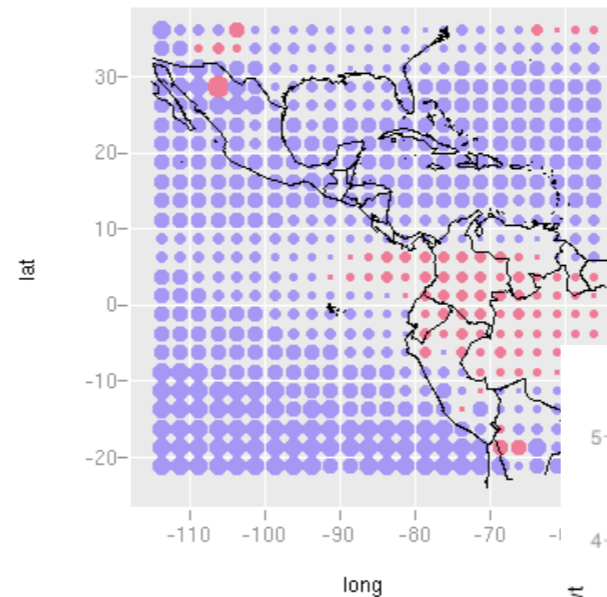
-  Adobe InDesign: Figures kept in separate files so master file remains small.
-  Powerpoint: templates available on web, but unwieldy for large posters and graphics.

# GOOD GRAPHICS PRINCIPLES



Naomi Robbins (2006)  
Creating More Effective Graphs  
<http://www.wiley.com/>



R package: ggplot2  
Hadley Wickham  
<http://had.co.nz/ggplot2/>

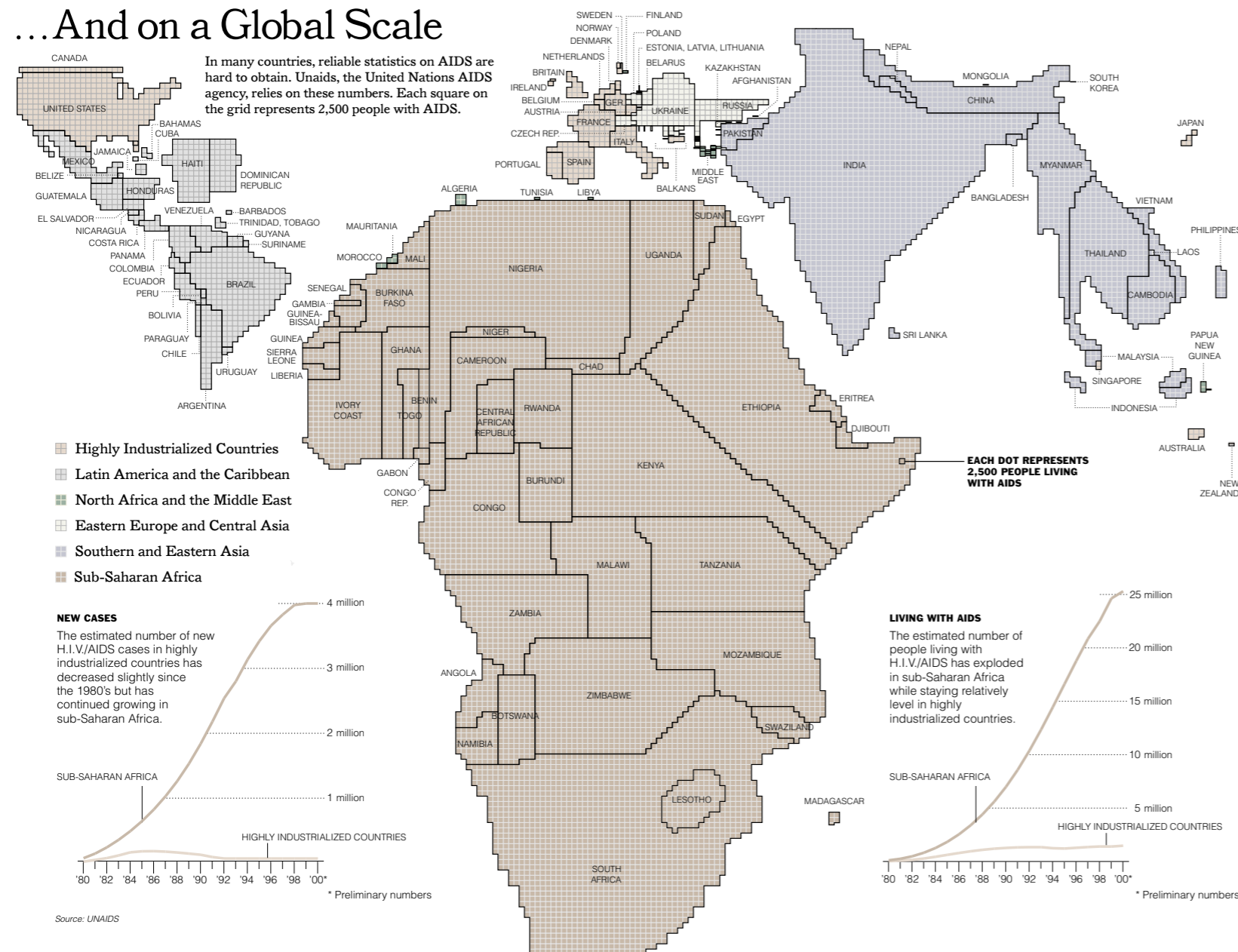


# COGNITIVE PERCEPTION

-  Familiarity and surprise: Following conventions (eg Tufte, Wainer) captures an audience by familiar, ease of interpretation. ....BUT
-  Breaking conventions elicits interest.

# COGNITIVE PERCEPTION




## ...And on a Global Scale



Map is familiar, draws in the reader. AND convention is broken by the size of country, which is interesting encouraging the curious reader to learn more.



# CONCLUDING COMMENTS

-  Posters allow the presenter to engage the audience in small groups for individualized discussion.
-  From experience: If it's a big poster print it in a couple of smaller pieces for transporting to the meeting!
-  You're a story teller.

# RESOURCES



[http://www.lib.uct.ac.za/infolit/  
poster2a.htm](http://www.lib.uct.ac.za/infolit/poster2a.htm)



[http://www.swarthmore.edu/NatSci/cpurrint1/  
posteradvice.htm](http://www.swarthmore.edu/NatSci/cpurrint1/posteradvice.htm)