Presentation Tips

Dr. Derrick Brazill
Biological Sciences
Hunter College

(in collaboration with SciMON)
Telling a Story

- Presentation should tell a story
- Must have a beginning
- Must have a middle
- Must have an end
Start Preparation With the Middle of the Story

- Presents audience with results
- Your results dictate the story you tell
- Organize them to help story flow
  - Does not need to be in chronological order
The Beginning of the Story

- Captures audience’s attention
- Puts your results in context
- Prepares audience for your results
  - Gives them background information
  - Keep it short and concise
The End of the Story

- Gives take home message to audience
- Summarizes results
- Puts results in context of bigger picture
  - Refers back to beginning of the story
  - Discusses future directions
Oral vs. Poster...What’s the Difference?

**Oral Presentation**
- Captured audience
- Set presentation time
- Must walk audience through

**Poster Presentation**
- People come and go
- Can lengthen or shorten presentation as desired
- Can be viewed without your input
2 Elements of an Effective Poster

- Simple and easy to read data

- Small blocks of explanatory text
Simple and Easy to Read Data

- Simplify data format

![Population Sizes Through Time](image1)

![Population Sizes Through Time](image2)
We used small samples to statistically infer total populations of predators and prey over the course of a 20 day experimental trial. We found that starting on Day 1, the number of predators began to increase. In addition, the number of prey began to decrease. The populations became equal on Day 8. By Day 20, all of the prey were gone.
Poster Design - Text

- Title – 85 pt.
- Author – 56 pt.
- Sub-headings – 36 pt.
- Body text – 24 pt.
- Captions – 18 pt.
Poster Design - Flow

Flow of presentation should be logical and obvious

- Flow of presentation should be logical and obvious
Poster Design - Formatting

- Leave breathing space around text
- Use simple fonts
- Use consistent font style and size
- Use images and graphs more than words
Colors should augment, not detract from poster

Use only 2 – 3 colors

Use dark type on light background

Keep background simple
Poster Design - Color

**Southern Flounder Exhibit Temperature-Dependent Sex Determination**

**J. Allen Luckenbill, John Grobis, and Russell Brooks**

Department of Biology, University of North Carolina, Wilmington, NC 28403

**Objective**

The objective of this research was to determine whether southern flounder exhibit temperature-dependent sex determination. Flounder were reared at different temperatures to determine if sex determination is influenced by temperature.

**Methods**

- Flounder were reared at temperatures ranging from 15°C to 25°C.
- Temperature was maintained using a constant temperature chamber.
- Fish were sexed at the end of the experiment using histological analysis.

**Results**

- Flounder exhibited temperature-dependent sex determination.
- High temperatures resulted in males, while low temperatures resulted in females.

**Conclusions**

- Southern flounder exhibit temperature-dependent sex determination, indicating a plastic response to environmental temperature.
- The results suggest that temperature may play a significant role in sex determination in southern flounder.

**Acknowledgments**

- Special thanks to the research team for their contributions to this study.
- Funding provided by the University of North Carolina, Wilmington.
A Large-Scale Public Library Renovation in Taiwan

Library Association of R.O.C.
National Taiwan Library of Taipei

ABSTRACT

There are 531 public libraries in Taiwan, including 258 urban public libraries and 273 village public libraries. In Taipei, the number of library branches and rooms is between 7,000 and 8,000. In the 1990s, they were listed in the digital environment at a lower cost level.

In order to upgrade the quality of public library services in Taiwan to meet user needs and to meet the challenges of the 21st century, the central government of Taiwan approved a budget of NT$1.2 billion in 2002 for a large-scale public library renovation project in 301 public libraries.

National Taiwan Library was designated as coordinator library to execute the project from February 2003 to June 2006. 301 public libraries were divided into eight groups according to the geographical area. A team leader was then formed, consisting of committee members from the fields of library and automation, science, architecture, space design, strategy, and history. 56 committee members were assigned to one of eight groups of 301 public libraries to give suggestions of renovation, improvement, replacement, service programs of each library.

The project was executed and completed efficiently and effectively in June 2006. The poster presentation will display the results of the renovation, improvement, replacement, library management, and services of 301 public libraries in Taiwan. The contents of the poster will be explained by eligible persons and reference tables.

Key Words: Public Libraries

www.ntl.gov.tw

Too many clashing colors
Too much text
Excellent
Helpful Sites

- [http://www.ncsu.edu/project/posters/](http://www.ncsu.edu/project/posters/)
- [http://colinpurrington.com/tips/academic/posterdesign](http://colinpurrington.com/tips/academic/posterdesign)
- [http://www.flickr.com/groups/pimpmyposter/](http://www.flickr.com/groups/pimpmyposter/)
Effective Oral Presentations

- Use large font
- Keep text to a minimum
- Title slide with take home message
- Label all parts of data
- Use animations to enhance, not detract.
Effective Oral Presentations

- Speak loudly and clearly
- Don’t speak in a monotone
- Use gestures
- Keep eye contact
Next, an example of a good oral presentation...
Understanding Cell Motility During Metastasis

Derrick Brazill
Hunter College Department of Biological Sciences
City University of New York
Cells grow as a benign tumor  

Cells in center of tumor starve  

Starving cells leave tumor  

Cells migrate into circulation  

Cells exit at new site  

Cells replicate forming new tumor  

Tumor Metastasis
Tumor Metastasis
Behavior of Metastatic Cells Depends on Actin

- Modify Cell Shape
- Modify Adhesion
- Modify Motility
Starvation Regulates Cell Shape in MDA-MB 231 Breast Cancer Cells

10% serum  
0.5% serum  
0.5% serum
Starvation Regulates Stress Fiber Formation in MDA-MB 231 Cells

% Cells with Stress Fibers

10% Serum

0.5 % Serum
Starvation Regulates Motility in MDA-MB 231 Cells
Phospholipase D

- Hydrolyzes phosphatidylcholine to choline and phosphatidic acid (signaling molecules)
- Regulates the actin cytoskeleton
- Misregulated in cancers
Starvation Regulates PLD Activity in MDA-MB 231 Cells

![Graph showing the relative PLD activity in MDA-MB 231 cells under different serum conditions. The x-axis represents serum concentration (10% and 0.5%), and the y-axis represents relative PLD activity (%). The graph indicates a significant increase in PLD activity under the 0.5% serum condition compared to the 10% condition.]
Paxillin

- Focal adhesion protein
- Cell-substrate interaction
- Cell movement
- Interacts with actin
- Regulated by phosphorylation
- Down regulated in cancer metastasis
Paxillin is Immunoprecipitated in MDA-MB 231 Cells

α-Paxillin Western Blot
Paxillin and PLD1 Coimmunoprecipitate in MDA-MB 231 Breast Cancer Cells

Lysate
α-Paxillin IP
Random Ig IP

PLD1

α-PLD1 Western Blot
Summary

- Starvation regulates cell shape and motility
- PLD mediates starvation signaling
- PLD and paxillin associate
Acknowledgements

- Dr. Jelena Pribic
- Foster Lab
- NIH RCMI
- NIH NIGMS
- NSF
Phospholipase D

- Hydrolyzes phosphatidylcholine to choline and phosphatidic acid (signaling molecules)
- Regulates the actin cytoskeleton
- Misregulated in cancers
Phospholipase D

- Hydrolyzes phosphatidylcholine to choline and phosphatidic acid (signaling molecules)
- Regulates the actin cytoskeleton
- Misregulated in cancers
Effective Presentations

- Use large font
Behavior of Metastatic Cells Depends on Actin

- Modify Cell Shape
- Modify Adhesion
- Modify Motility
Behavior of Metastatic Cells Depends on Actin

- Actin makes up the cell cortex which is involved in regulating and modifying cell shape.
- Actin helps form focal adhesion plaques which are responsible for controlling and modifying cell adhesion.
- Actin makes up the stress fibers and helps create pseudopods, both of which are needed to activate and modify cell motility.
Effective Presentations

- Use large font
- Keep text to a minimum
Starvation Regulates Motility in MDA-MB 231 Cells

![Bar graph showing the effect of serum starvation on cell migration in MDA-MB 231 cells. The x-axis represents serum concentration (10% and 0.5%), and the y-axis represents the number of cells migrated. The graph shows a significant increase in cell migration at 0.5% serum compared to 10% serum.](image-url)
Motility

- 10%: Bar height
- 0.5%: Bar height with error bars
Effective Presentations

- Use large font
- Keep text to a minimum
- Title slide with take home message
- Label all parts of data
Starvation Regulates Cell Shape in MDA-MB 231 Breast Cancer Cells

10% serum 0.5% serum 0.5% serum
Starvation Regulates Cell Shape in MDA-MB 231 Breast Cancer Cells

10% serum

0.5% serum

0.5% serum