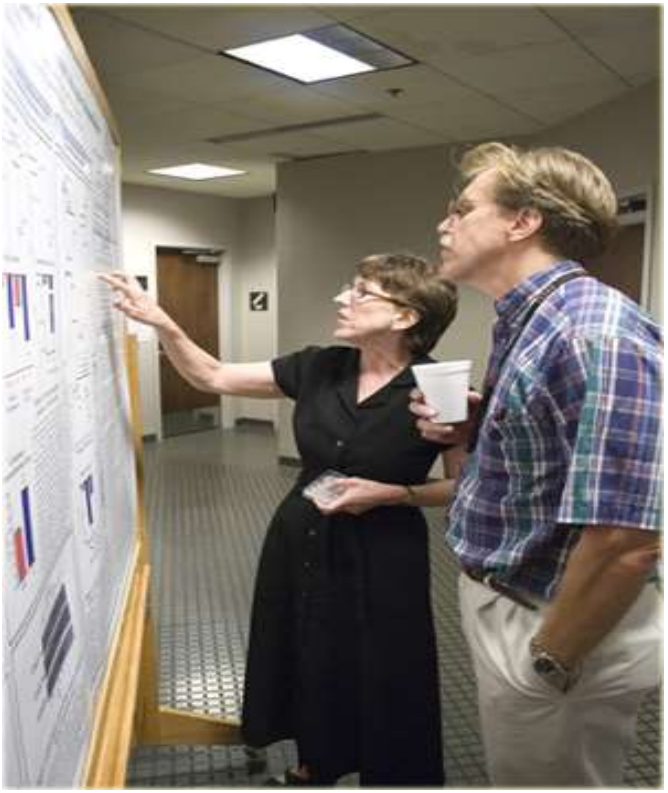
Poster Presentations

A. Tjiramanga
School of Communication
Polytechnic of Namibia
Seminar Series
23 May 2008

Poster Presentations

For conferences and fairs



Overview

- An effective poster
- Define your message
- Know your audience
- An effective abstract
- An effective poster (planning, focus, layout, headings, graphics, text, colours, editing, software)
- Present your poster
- Examples of posters
- Resources

Effective Posters – "SHOW"

- Visual communication tool: info, conversation starter, advertise + summary of your work
- Engage colleagues in conversation
- Main points to many people
- Focus on single message
- Graphs and images
- Little text
- Well-ordered sequence

Define your message

- Clear message
- Images +Short texts
- Know your message!
- Leave out unnecessary info
- Be explicit! Ex: The effect of x on y…

  Substance x induces y-cells

- Look for the strongest statement
- Interpret

Know your audience

- Different types of readers: specialists, wide-ranging audience, general audience
- The big picture (your work)
- Plain language
- No jargon and acronyms (unless special)
- Interpret findings

An effective abstract

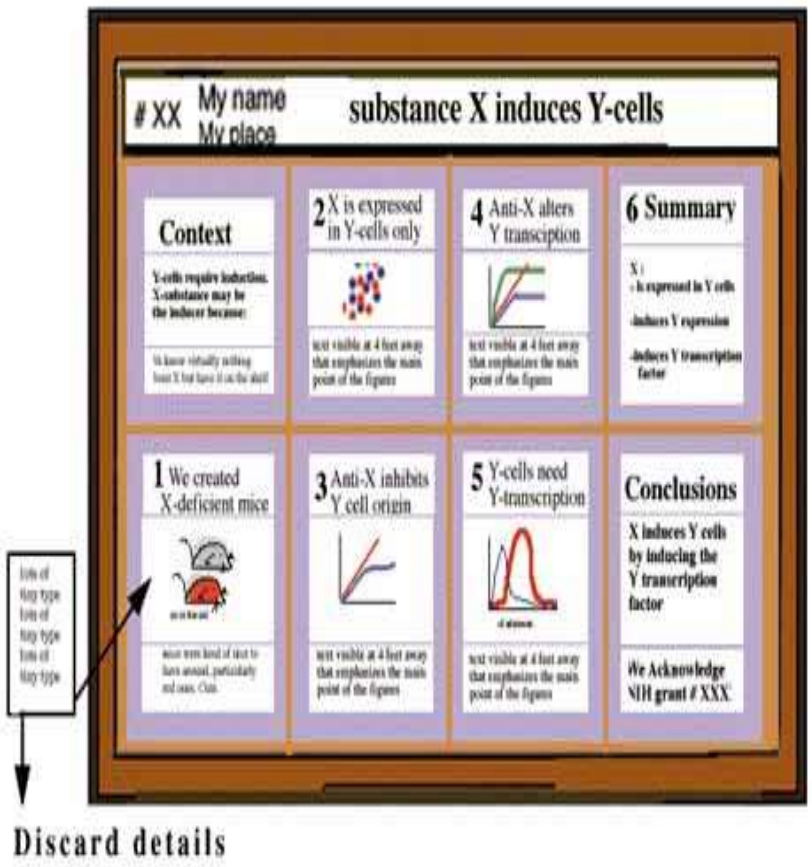
- Explain why
- Objectives of your work
- Explain methods
- Results, conclusion, recommendations
- No abstract on your poster

Create your Poster: Planning

- What's my message?
- How much room do I have?
- How much money do I have?
- What milestones should I establish?

Focus

- Simple messages
- More memorable
- Only essential details
- Edit carefully – plain language, simple sentence structures



Layout

- Visual grammar
- Column format
- Organisation cues
- “reader gravity”
- clear headings
- Balance text and graphics
- Use white space creatively

Headings

Headings: Title, section, title figure captions

- Summarise
- Organise
- Be hierarchical
- Be bold

Text

- Minimise text
- Graphs and images
- Text elements (max 50 words)
- Phrases rather than full sentences
- active voice
- Avoid jargon (depends on audience)
- Left-justify text
- Serif font (eg: times) – easier to read text
- Sans-serif font (eg. Helvetica) – for headlines
- Size: 24 in text, 36 for headlines
- Figures: also large
- Title 5 cm

Graphics

- Communicates relationships quickly
- Simple and clear
- Explanation
- Line graphs, barcharts, pie charts
- 3-D graphs diff to explain
- Visible headlines
- photos

Edit! Edit! Edit!

- Ruthlessly edit to reduce text
- Plain language
- Sentence structure
- phrases
- delete details
- Remove irrelevant messages
- ask Colleagues to comment
- 60 sec Evaluation (objectives, main message, contact?)

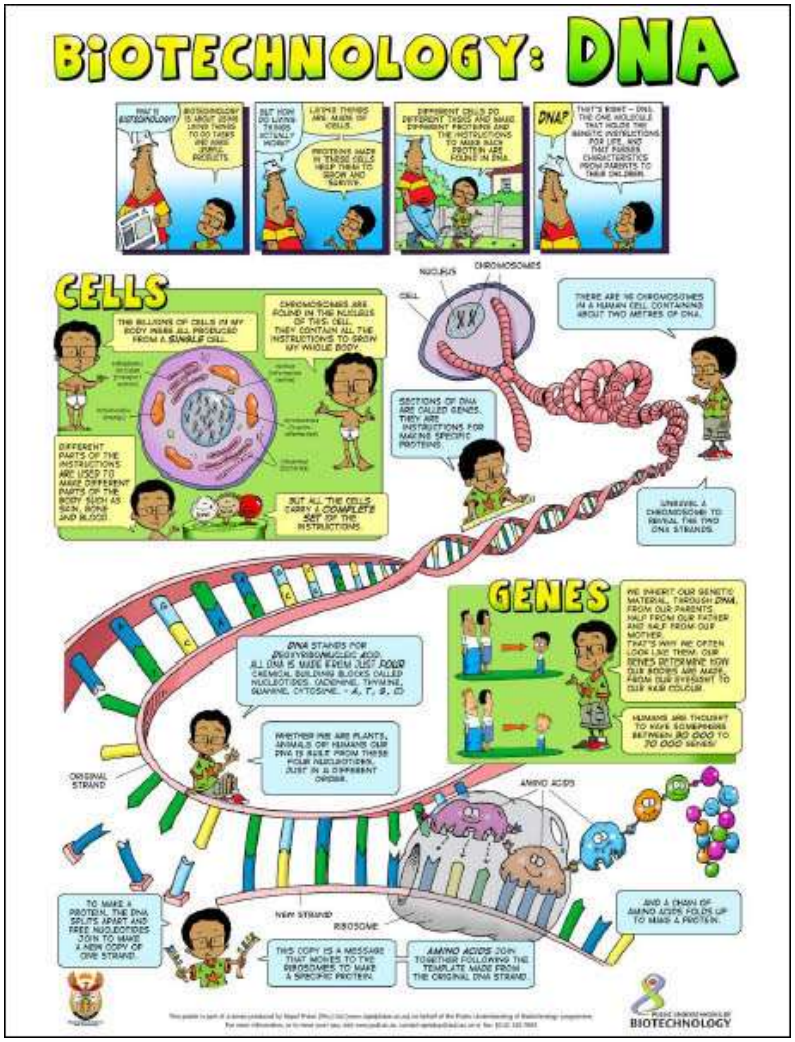
Software

- MicroSoft PP
- Adobe Illustrator and InDesign
- Adobe Photoshop
- MicroSoft excel (graphics)
- Delta Graph
- OpenOffice (vector graphs)

Present your Poster

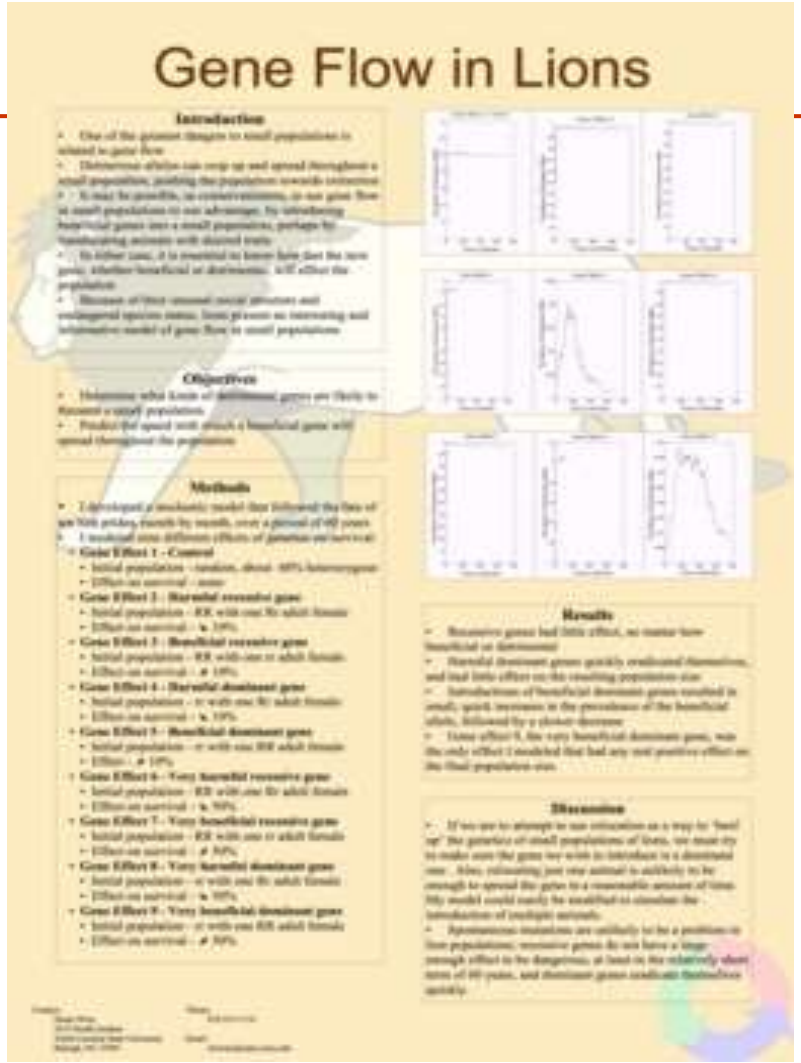
- Arrive early
- put up poster
- Be at your poster during your assigned presentation time
- Handouts
- business cards
- Pen and paper for comments

Examples



- Audience?
- Clarity?
- Language?
- Effectiveness?
- The big pic?
- Methods?
- Results, Conclusion, Recommendation

The Importance of User Experience



Gene Flow in Lions

Introduction

- One of the greatest dangers to small populations is related to gene flow
- Deleterious alleles can crop up and spread throughout a small population, pushing the population towards extinction
- It may be possible, in conservationists, to use gene flow in small populations to our advantage, by introducing beneficial genes into a small population, perhaps by translocating animals with desired traits
- In either case, it is essential to know how fast the new gene, whether beneficial or detrimental, will affect the population
- Because of their unusual social structure and endangered species status, lions present an interesting and informative model of gene flow in small populations

Objectives

- Determine what kinds of detrimental genes are likely to threaten a small population
- Predict the speed with which a beneficial gene will spread throughout the population

Methods

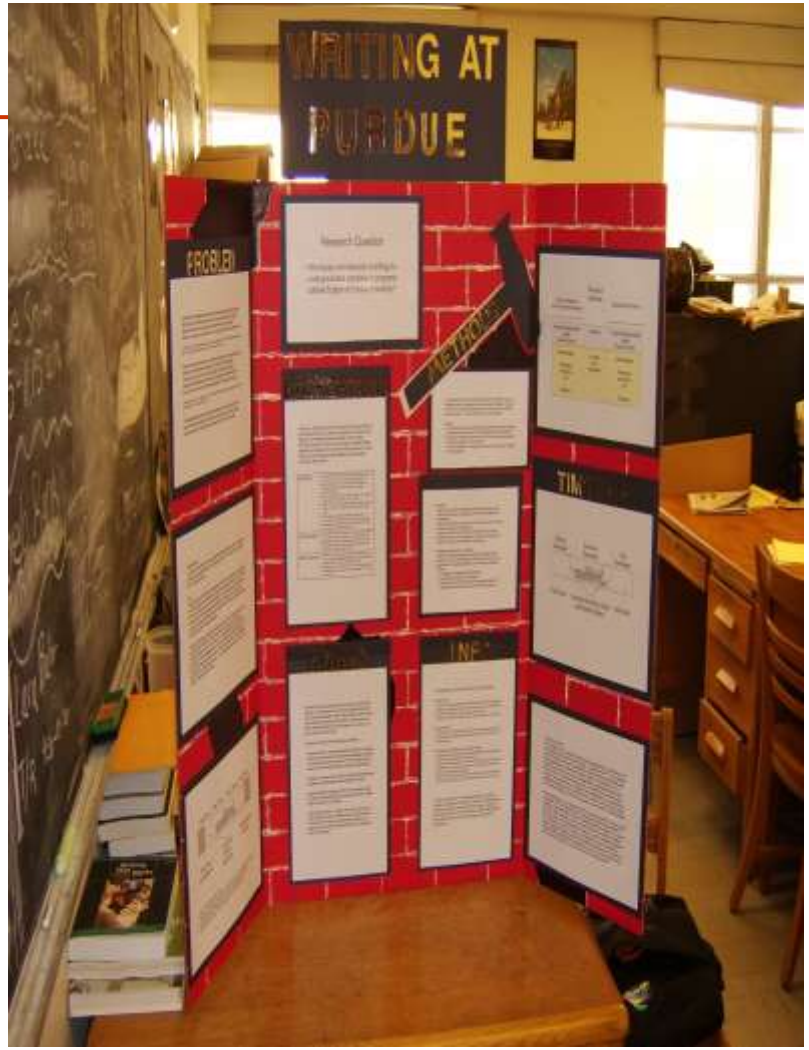
- I developed a stochastic model that followed the fate of an NFK prides, month by month, over a period of 60 years
- I modeled nine different effects of genetics on survival:
  - **Gene Effect 1 - Control**
    - Initial population – random, about 40% heterozygous
    - Effect on survival – none
  - **Gene Effect 2 - Harmful recessive gene**
    - Initial population – RR with one Rr adult female
    - Effect on survival – ¼ 10%
  - **Gene Effect 3 - Beneficial recessive gene**
    - Initial population – RR with one rr adult female
    - Effect on survival – # 10%
  - **Gene Effect 4 - Harmful dominant gene**
    - Initial population – rr with one Rr adult female
    - Effect on survival – ¼ 10%
  - **Gene Effect 5 - Beneficial dominant gene**
    - Initial population – rr with one RR adult female
    - Effect – # 10%
  - **Gene Effect 6 - Very harmful recessive gene**
    - Initial population – RR with one Rr adult female
    - Effect on survival – ¼ 90%
  - **Gene Effect 7 - Very beneficial recessive gene**
    - Initial population – RR with one rr adult female
    - Effect on survival – # 90%
  - **Gene Effect 8 - Very harmful dominant gene**
    - Initial population – rr with one Rr adult female
    - Effect on survival – ¼ 90%
  - **Gene Effect 9 - Very beneficial dominant gene**
    - Initial population – rr with one RR adult female
    - Effect on survival – # 90%

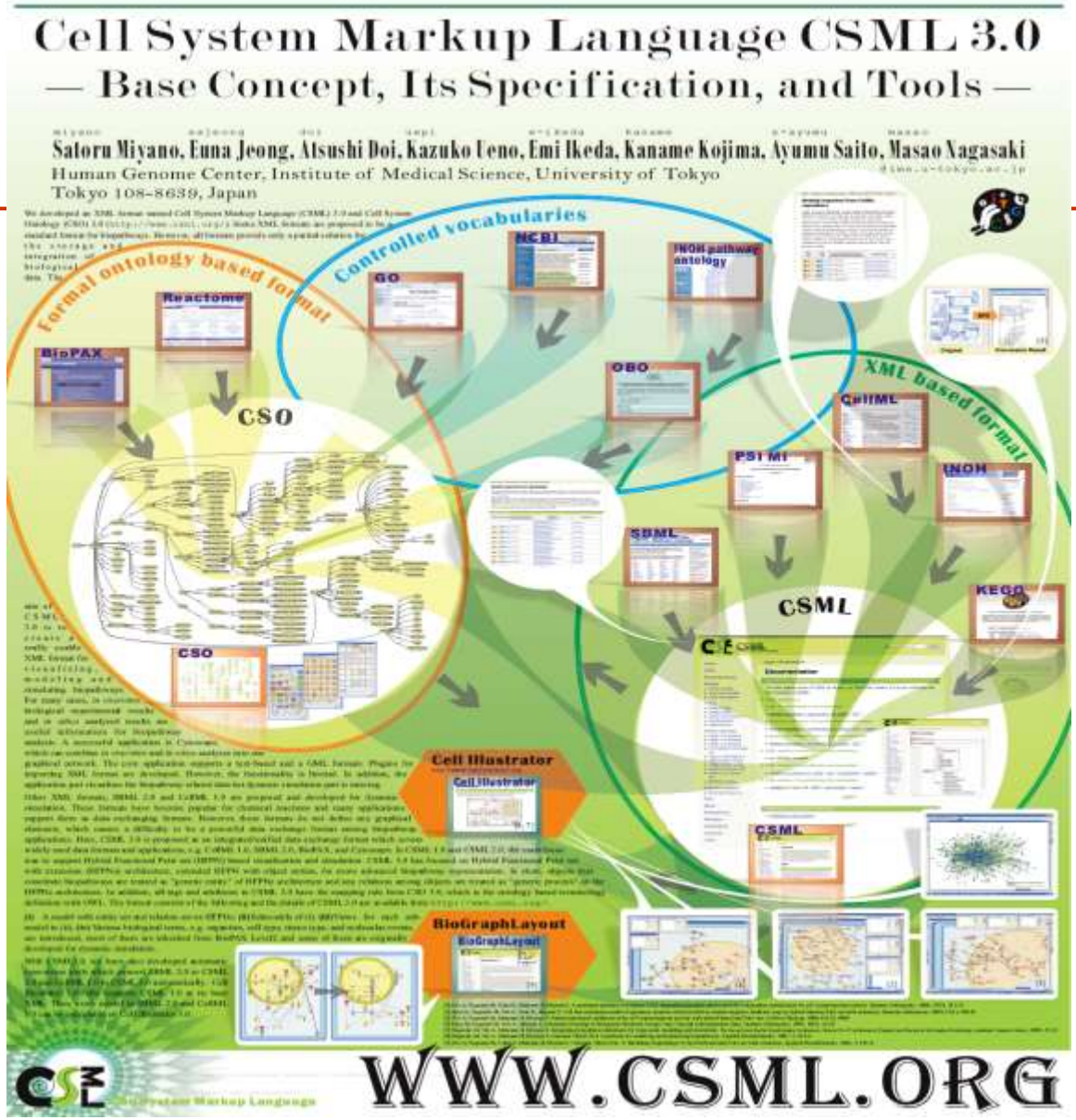
Results

- Recessive genes had little effect, no matter how beneficial or detrimental
- Harmful dominant genes quickly eradicated themselves, and had little effect on the resulting population size
- Introduction of beneficial dominant genes resulted in small, quick increases in the prevalence of the beneficial allele, followed by a slower decrease
- Gene effect 9, the very beneficial dominant gene, was the only effect I modeled that had any real positive effect on the final population size.

Discussion

- If we are to attempt to use relocation as a way to 'beef up' the genetics of small populations of lions, we must try to make sure the gene we wish to introduce is a dominant one. Also, relocating just one animal is unlikely to be enough to spread the gene to a reasonable amount of time. My model could easily be modified to simulate the introduction of multiple animals.
- Spontaneous mutations are unlikely to be a problem in lion populations; recessive genes do not have a large enough effect to be dangerous, at least in the relatively short term of 60 years, and dominant genes eradicate themselves quickly.




Cell System Markup Language CSML 3.0
— Base Concept, Its Specification, and Tools —
Satoru Miyano, Euna Jeong, Atsushi Doi, Kazuko Ueno, Emi Ikeda, Kaname Kojima, Ayumu Saito, Masao Nagasaki
Human Genome Center, Institute of Medical Science, University of Tokyo
Tokyo 108-8639, Japan
Formal ontology based format
Controlled vocabularies
XML based format
Reactome
BioPAX
CSO
GO
NCBI
INOH pathway ontology
OBO
CellML
PSI MI
INOH
SBML
KEGG
CSML
Cell Illustrator
BioGraphLayout
WWW.CSML.ORG

Resources

- George Hess & Leon Liegel Effective Poster Presentation Site www.ncsu.edu/project/posters/
- Kathryn Tosney's Effective Poster Presentation Site (U. Miami) www.bio.miami.edu/ktosney/file/PosterHome.html
-
- Edward Tufte's Web Site (focus on visualizing data) www.edwardtufte.com/tufte/

Books and Articles

- Block, Steven M. 1996. Do's and dont's of poster presentations. Biophysical Journal 71: 3527-3529.
- Briscoe, Mary Helen. 1996. Preparing Scientific Illustrations: A Guide to Better Posters, Presentations, and Publications. Springer, New York.
- Hess, George R. and Elizabeth N. Brooks. 1998. The class poster conference as a teaching tool. Journal of Natural Resources and Life Sciences Education 27: 155-158.
- Liegel, Leon H. and Delbert Thompson. 1989. Poster presentations for scientific meetings. Journal of Agronomic Education 18: 69-75.
- Nicol, Adelheid A. M. and Penny M. Pexman. 2003. Displaying your findings: a practical guide for creating figures, posters, and presentations. American Psychological Association, Washington, DC.

Books and articles

- Teixeira, Art. 1997. Preparing posters for technical presentations. Resource 4(4): 15-16.
- Tufte, Edward. 1983. The Visual Display of Quantitative Information. Graphics Press, Cheshire, CT.
- Tufte, Edward. 1995. Envisioning Information. Graphics Press, Cheshire, CT.
- Tufte, Edward. 1997. Visual Explanations: Images and Quantities, Evidence and Narrative. Graphics Press, Cheshire, CT.
- Wheildon, Colin. 1995. Type and Layout. Strathmoor Press, Berkeley, CA.
- Woolsey, J.D. 1989. Combating poster fatigue: How to use visual grammar and analysis to effect better visual communication. Trends in Neurosciences 12: 325-332.

Thank you!

My contacts details:

A. Tjiramanga

Cell 812399007

Work: 207 2193

atjiramanga@polytechnic.edu.na