MASTERING POSTER PRESENTATIONS

ANGELIA CARO-MONROIG
OCTOBER, 26 2016

GRADUATE RESEARCH AND INNOVATION CENTER (GRIC)
UNIVERSITY OF PUERTO RICO, MAYAGÜEZ CAMPUS
I have 12 hours to throw this thing together and get it printed before its due!!!!!!!!!!!!!!!
OBJECTIVES:

• Observe Poster layout
• Explain sections of a poster
• Prioritize information to include
• Plan the poster
STUDENTS IN SCIENCES

Title

Author’s names & Affiliations

Introduction/Abstract

Materials/Methods

Results

Discussion

Acknowledgements/References

POSTER!!!
STUDENTS IN ENGINEERING

Title

Author’s names & Affiliations

Introduction/Abstract

Project objectives

Approach

Results/Discussion

Acknowledgements/References

POSTER!!!
LESS IS MORE!!!
Effect of Microbial Legacy on Nitrogen Cycle and Restoration Success

Tzu Chao, Clare Glinka, and Christine V. Hawkes
University of Texas at Austin

Introduction
- Nitrogen (N) cycle plays a key role in ecosystem and every transformation of the N cycle driven by microbes.
- Restoration attempts on converting abandonment rangelands in South Florida back to the native scrub ecosystems allow a unique opportunity to study persistent effects of previous vegetation left on the microbial community and ecological processes.
- Biological crust is essential for native ecosystem.

Method
- Biogeochemical
  - KCl extraction
  - Photosynthetic activity determined by fluorometry
  - Molecular approach
  - PCR
  - RFLP
  - Direct sequence analysis

Possible mechanisms
- Pasture vegetation has caused a shift in soil microbe community and chemistry.
- Frequent disturbance favors more resilient microbes and changes community composition.

Sample restriction fingerprint
- DNA based fingerprints allow characterization of community differences.
- Couple with clone library will allow identification of species.

Questions
- How does native crust affect microbial legacy?
- Which impacts the N-cycle more? Microbial abundance or composition?

Field Site: Native scrub lands and abandoned pastures at Archbold Biological Station.
- Sites are abandoned pastures and native scrub lands subjected to pasture removal treatments and crust addition treatment (Fig 2).

- Crust addition decreases inorganic N, but does not affect microbial abundance.
- Native soil respond and tracks moisture.
- Inorganic N is not tracked by any site.
- Pasture site response to moisture unknown.

Acknowledgment
- This project was supported by the National Research Initiative of the USDA Cooperative State Research, Education, and Extension Service, National Science Foundation and the Department of Defense.
- Special thanks to all members of the Hawkes Lab, Juanger Lab and Manges Lab.
Demographic Shifts in the City: Comparisons of the Populations of Tokyo and Mumbai Over Time

Timmy Huynh  ●  Advisor: Dr. Shannon Cavanagh
Department of Sociology and Population Research Center  ●  The University of Texas at Austin
Bridging Disciplines Program  ●  Social Inequality, Health & Policy

Introduction
The development of a city often involves the interaction of the population and growth, how the city is growing and developing, and the way people are living within the city. This paper will compare the population changes of Tokyo and Mumbai over a forty-year period (1960-2000 and 1961-2001, respectively).

Tokyo - Highly developed city
- Rapid economic growth
- High population density
- High concentration of industry and commerce

Mumbai - Developing city
- Slow economic growth
- Low population density
- Low concentration of industry and commerce

Background

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tokyo</td>
<td>Rapid economic growth</td>
<td>No data available</td>
<td>Increased urbanization</td>
<td>18,696,000</td>
<td>22,696,000</td>
</tr>
<tr>
<td>Mumbai</td>
<td>Slow economic growth</td>
<td>Eco-friendliness</td>
<td>Increased urbanization</td>
<td>12,396,000</td>
<td>14,696,000</td>
</tr>
</tbody>
</table>

Data: Graphs and Charts


Discussion

Comparative data:

- Tokyo's population growth has been faster than Mumbai's,
- Mumbai's population growth has been slower than Tokyo's,
- Tokyo's population growth has been more stable than Mumbai's.

Points to consider:

- Aging of population
- Effect of technology
- Effect of immigration
- Effect of education

Acknowledgements and References

I would like to thank Dr. Cavanagh for her role in my research and the guiding of my work. I would also like to thank the University of Texas at Austin, the Department of Sociology and Population Research Center, and the Bridging Disciplines Program for their support.

Sociology Studies
Title of your work with the first letter capitalized, in 72 point font, left-aligned, and two lines long: colons okay

Introduction

All text on the poster should be in Arial. Font sizes for each text subtype sizes have been mentioned. Body text should have a font size of 28, while Figure and Table captions should have a font size of 20. All text must be justified.

If you are including a figure wrapped with the text, ensure at least a 0.50 inch gap between the edge of the figure and the text box/caption box, as demonstrated by this text box and the figure on the right.

Project Objectives

1. The section headings that follow are to be used at your discretion.

2. We have included suggested standard headings. Make sure you include enough information to explain the motivation/concept, the experimental procedure, the results, and what can be concluded.

3. Do so briefly. Suggestion is 400 words.

4. You are free to use any mathematical typesetting software you like, just be sure to make it look professional.

5. This is your presentation. It reflects your effort.

Approach

Ensure that the following guidelines are maintained:

0.5 inch gap between the end of a text box and the start of the box for the next section’s underlined subheading.

0.5 inch gap between the underlined subheadings and the start of the text box for the main text.

Maintain all the guidelines set for the poster edges and the margins.

Results and Discussion

Present your results here. Because pictures are worth all those thousands of words, you may want to use a few figures.

Try to use Arial in their creation as this will make them look more at home in this template.

You can continue your results to this page if needed. Try not to have awkward whitespace on the poster, then go mindful of spacing on the poster of your sections and bubbles.

Conclusions

Miscellaneous bits of information that might be of use:

Text size:

Title: 72pt Authors section: 36pt Headings: 44pt

Body text: 28pt Captions: 20pt Body columns: 12" wide, justified text

Margins are 1" all around

To toggle gridlines in PowerPoint:

On Windows use shortcut “Alt-F9”

On Mac: Home > Arrange > Align > View Gridlines

Acknowledgements

Be sure to list anyone you wish to thank and acknowledge any funding that made this work possible.

References
WHAT MAKES A GOOD POSTER?

• The text must conform to the norms of sound scientific reporting: clarity, precision of expression, and economy of words.
• Should be the correct size for that particular conference
• Word count of about 300 to 800 words
• Effective use of graphics, color and fonts

So what are some common sizes?
36x48, 36x54, 36x60, 36x72, 42x56, 42x63, 42x84, 48x72, 48x96.

http://guides.nyu.edu/posters
THINGS TO CONSIDER BEFORE DESIGNING POSTER:

- **Audience**
  - Writing for expert readers

- **Purpose**
  - Persuade
  - Inform
POSTER DESIGN PROGRAM OPTIONS

- Microsoft PowerPoint
- Adobe Photoshop
- Adobe Illustrator
- Adobe InDesign
- Corel Draw
- Gimp
- LaTex
- Open Office
TYPICAL POSTER SECTIONS
TITLE:

- Describes the research project concisely using a short phrase that forecasts the research project.
- The title might highlight one or two major research findings of the study.
- The title should be no more than two lines
INTRODUCTION:

• Introduce the specific research question, its importance, conduct a very short literature review, and state the purpose of the study.

• The literature review should contain:
  1. An explanation how the current research project fits in with what is currently known in the field
  2. Outline the gap in scientific knowledge that the current project addresses.

• Include your list of references in a separate section

• In some disciplines it is conventional to include in-text citations in the Introduction (and the Discussion)

• In other disciplines only the list of references is included.
MATERIALS AND METHODS:

• They should explain the methodology used to conduct the research as well as the materials used. This section should explain:

1. What you did to conduct your research project, and
2. How you did

• Should let searchers in your field know detailed information about your materials and methods to ensure that your research approach is sound
RESULTS

• Report the results/major findings
• Show the results using visuals, charts, graphs, maps, drawings, photographs.
• Use captions to briefly explain your visuals
• The Results is usually the longest section of a scientific poster.
ACKNOWLEDGEMENTS:

• List any organizations that provided funding for the project and include the grant number.
• This section can also be used to acknowledge other project contributors and/or advisors.
• Students often use this section to acknowledge their faculty advisor here.
REFERENCES

• Include full citation information for all of your sources.

• Cite references in the citation style used in your field:

  • APA (American Psychological Association) is commonly used in the social sciences,
  • CSE (Council of Science Editors) is commonly used in scientific disciplines.

• Check with your professor, advisor, or another professional working in your field to determine the correct style.
Where do I even start?

How am I going to get this done on time?
CHECK LIST QUESTIONS: BEFORE STARTING

Verify Poster guidelines for the conference:

☐ View Poster specifications

1. Flat or Tri-Fold?

2. Landscape or portrait?

2. Poster Size if making a flat poster (24” x 36”, 36” x 48” or 42” x 48”)
Changing poster size and Direction

STEP 1
Changing poster size and Direction

STEP 2
Changing poster size and Direction

STEP 3
Changing poster size and Direction
STEP 4
SCHEDULE A MEETING WITH YOUR ADVISOR

- Decide what Computer Program to use (PowerPoint, Photoshop, etc.)
- Figure out if your poster could require another methodology section
- Conclude results, case studies, etc. from your Research Project you will include in the poster
- Know the cultural aspects of the convention in order to decide the proper attire.
- Discuss: What tactile/kinesthetic components (handout, artifacts, etc.) will accompany your poster?
- What is the title going to be? Who are my collaborators (Name, Title, Date, etc.)
CHECKLIST: FINAL TASK

- View the poster either by projecting it on a large screen in a classroom or print it scaled down to 8-1/2” x 11” (In PowerPoints Print menu, click Full Page Slides, and then check Scale to Fit Paper).
- Get peer/faculty feedback (on multiple occasions) on your poster.
PRACTICE EXCERSICE:

• Draw out an outline of how you want your poster to look like.
• Include all the sections discussed.
• Do it either landscape or portrait style depending what you feel works best.
QUESTIONS???
REFERENCES

• How To Make A Scientific Research Poster By: John Cornell Center of Materials Research Poster Poster Presentation: http://www.MakeSigns.com

• http://hsp.berkeley.edu/sites/default/files/ScientificPosters.pdf

• http://writingcommons.org/open-text/genres/stem-technical-writing/1194-creating-viral-impressions-composing-infographics-for-the-classroom-and-work-space

• http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1876493/

• http://www.utexas.edu/ugs/ugr/poster/samples#stem

• http://me.engin.umich.edu/academics/meus/author-guidelines/poster

• http://www.hope.edu/academics/celebration-undergraduate-research/resources/make_great_posters_checklist.pdf
This activity is sponsored by the Transformational Initiative for Graduate Education and Research (TIGER), US Department of Education, Title V, Part B, Promoting Postbaccalaureate Opportunities for Hispanic Americans (PPOHA) Program (#P031M140035).