PREPARING A CONFERENCE POSTER IN THE SCIENCES

Graduate Writing Center, UCLA
Outline

• Writing the abstract
• What goes into a poster presentation?
• Format of a poster
• Presenting a poster
WRITING THE ABSTRACT
Types of abstracts

**Informative/heading**
- Condenses the paper
- Most journal articles

**Indicative/descriptive**
- Table of contents or a road map
- Reviews, conference reports, etc.

A good abstract will help your poster be selected and ensure interested people will show up!
Writing the abstract

**Write it first!**

- Self-contained
- Clear, simple, and concise
- Focus on key points of your research
- Keep in mind the focus of the conference or meeting for scope
Follow the IMRAD format

**Introduction**
- Set up the state of the field
- What is the gap and how do you fill it?

**Methods**
- What did you do and how did you do it?

**Results**
- What is the main conclusion from your work?

**Discussion**
- How will this change the field?

Adapted from Lauren Slone’s NSF GRFP workshop, Fall 2014
Formatting an abstract

Do’s:
• Keep it to one paragraph
• Think about the eventual poster structure
• Choose a topic of your research that would translate well to a poster- focus on a few key points
• Keep it relatively jargon free

Don’ts
• Exceed length specified by the organizers (generally 250 words)
• Include literature references (unless asked)
• Include tables or figures
• Use long terms or abbreviations
WHAT GOES INTO A POSTER PRESENTATION?
Title and abstract

The title should be attention-grabbing and engaging

- Broad enough to attract those out of your field, but still interesting for those “in the know”
- This along with the abstract is what gathers interest in your poster
- Like the abstract, your title should fit the level of detail expected of the meeting

- Your abstract should not go on your poster
Introduction or Background

Introduce the nature of your research

- Unlike a paper, you can use figures and eye-catching photos to best explain your research problem
- This should be brief with limited definitions and details
- Give enough context for the rest of the poster

- I like to end this section with a statement of the research problem/hypothesis or the objective of the research
Materials and methods

A section regarding your methods should be included on your poster

- Generally a flowchart of the steps you took or a diagram of a particular experimental set-up will suffice
- It is not expected that you use the same level of detail that you would use for a talk or paper
- Gives context for any experiments you used
Results

The largest portion of your poster will be results

- Comment on if the experimental set-up worked
- Use descriptive wording and include qualitative discussions of results
- Use figures and include descriptive figure legends
- Use charts and tables (with legends) if needed

- If the reader **skipped** all the other sections, would they understand your results?
Conclusions

State the final result

• Do not repeat the results section
• Describe significance of work
• Use this section to discuss future directions
• This will be briefer than in a paper or talk
Literature Cited and Acknowledgements

Include literature cited if any

- Should be abridged- about 5-10 sources that are directly relevant to the information on the poster
- Follow the correct citation style for your field (especially if it is a large society meeting)

Thank anyone who helped with the work

- Acknowledge funding sources and note conflicts of interest
POSTER FORMAT
WHAT MAKES A POSTER EFFECTIVE?
What does your audience expect
Sample format - traditional results arena

Title title title title title title title title title title title title title title title title title title title title title title

Author, Author, and Author
Address(es)

Introduction
Replace the “Blah, blah, blah” with your own “Blah, blah, blah.”

Results
Blah, blah, blah

Conclusions
Blah, blah, blah

Materials and methods
Blah, blah, blah

Literature cited

Acknowledgments
Blah, blah, blah. This file from http://colinpurrington.com/tips/poster-design. You can reuse this URL, of course.

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Sample format- creative results arena

Title title title title title title title title title title title title title title title title title title title title title title

Author, Author, and Author
Address(es)

Introduction
Replace the “Blah, blah, blah” with your own “Blah, blah, blah.”

Results
Blah, blah, blah

Materials and methods
Blah, blah, blah

Conclusions
Blah, blah, blah

Literature cited

Acknowledgments
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http://colinpurrington.com/tips/poster-design
Getting creative- what not to do

Colin Purrington's example of a 'bad' poster is crammed with text and has a distracting background.
predicting genotype from phenotype

Michael D. Barton, Hazel A. Barton
University of Akron

www.michaelbarton.me.uk

Getting creative

Logical flow

White space

Three column format

Easy to interpret figures

Poster can be read quickly and understood without presenter's input

Sparse text

http://www.bioinformaticszen.com/post/genotype-from-phenotype/
What was missing?

- Introduction/Background
- Rationale/Hypothesis
- Overall Objective/Bigger Picture or Significance
- Figure legends or data

- Knowing the conference would be helpful here
Fonts and Font Size

• Stick to one combination of two fonts

**Serif:**
- For the body of poster
  - Times New Roman
  - Georgia
  - Book Antiqua

**Sans serif:**
- For the headings
  - Arial
  - Calibri
  - Helvetica
  - *Never Comic Sans*

**Main title:**
- 100 point font
- 4 cm high

**Subheadings:**
- 50 point font
- 1.5-2 cm high

**Body text:**
- 25 point font
- 0.5-1 cm high

These are guidelines more than rules. The key is to finding a style and size that is readable and large.
Software to use for poster design

- Microsoft PowerPoint is the most common

For those of you who are more tech or design savvy:
- QuarkXPress
- InDesign
- Scribus
- Inkspace (free)
- LaTeX (works best for text heavy or equation heavy posters)

For those of you who have no idea how they are going to design a poster:
- Stick with what you know (PowerPoint)
- PosterGenius (free trial)
Edit and revise

Get feedback
- From your labmates
- From your classmates
- From your colleagues
- From your advisor

Print out a copy as a small PDF
- Do the colors complement each other?
- Is the text large enough?
- Is the text readable?
- Is there enough white space?

Look at it in multiple formats
- Both as a PowerPoint or as a PDF
- Does it look right on your screen?
- Does it look right printed?
PRESENTING A POSTER
How to dress

**ACADEMIC DRESS CODE**

- **White Tie**
  - Only if you win the Nobel Prize.
  - Never worn a tie before.

- **Wizard robes**
  - Halloween and/or Graduation.
  - Trick or Treat?

- **Business Suit**
  - Ass: if you own a suit.
  - As if you own a suit.
  - NEVER wear a business suit (ties are for sell-outs).

- **Smart Academic**
  - Is there Powerpoint involved?
  - Break out the Khakis.
  - Elbow pads are a plus.

- **Worksuit**
  - A.K.A. your pajamas.
  - Accessorize!

- **Hobo-chic**
  - Only if you win the Nobel Prize.
  - Leader in his field.
  - Spare a dime?

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Presenting the poster

Making the poster is only part of the presentation:

- Think ahead about questions
- Ask questions
- Networking
- Handouts or business cards (if applicable)

This is an opportunity for discussion:

- Find a collaborator
- Learn a new technique
- Get a suggestion for that wall you haven’t quite gotten over yet
Do not present the poster in its entirety

- Poster presentations are more of a dialogue than a talk
- Visitors will come and go
- Helpful to have an elevator pitch, then focus on answering questions
The Elevator Pitch

This should be brief

- Generally a two-sentence overview of what motivated your research
- Helpful to have 30 second, 1 minute, and 2 minute pitches

Focus on the bigger picture of your work

- Should be understandable to a generalist in your field (depending on your audience)

Lead visitors to your main results and conclusions
**The Elevator Pitch Structure**

**AAA Structure**

- **AND, AND, AND**
- “We wanted to investigate this problem, so we generated these data **AND** these data **AND** the results were like this **AND** I came to this conclusion.”
- Typical, but just facts

**ABT Structure**

- **AND, BUT, THEREFORE**
- “Here the data are showing this **AND** this… **BUT** if we look at these data, we see something very different from what was expected… **THEREFORE** I concluded this.”
- More narrative and interesting

(Olson 2015)
**ABT Structure**

**AGREEMENT:** and, also, equally, identically, uniquely, like, moreover, as well as, furthermore, likewise, similarly

**CONTRADICTION:** but, despite, however, yet, conversely, rather, whereas, although, otherwise, instead, albeit, still

**CONSEQUENCE:** therefore, so, thus, consequently, hence, thereupon, accordingly, as a result, henceforth, for this reason, in that case, since

Even though the elevator pitch is simple and ABT is concise, your work shouldn’t be “dumbed-down” Retain the key information of your poster
I am interested in protein modification in the mitochondria. I have used traditional biochemical methods to validate known modifications and found that these methods were subpar. However, by using a specific yeast strain, I was able to overcome this problem. As a result, I not only have validated known modifications in the literature, but have found new sites in the mitochondria as well. This method can be used for the future study of modifications in yeast.
Exercise

• What was difficult about writing for the audience?
• Could you focus on only a few points?
• What structure did you use?
• Was it difficult to stay broad?
• How do you identify the key elements of your study?

• ABT can be useful for writing poster abstracts as well
Navigating in the moment

What if you find a mistake?
• Bring a black pen and white paper to fix any mistakes you find

What if no one is sticking around for more than a glance?
• We have the tendency to walk the audience through our posters
• This isn’t as effective and most interested parties don’t want to sit through five minutes of you pointing at figures
• Give your elevator pitch, let the reader know that they should feel free to ask questions, and focus on creating a dialogue

What if no one shows up to your poster?
• Be at your poster during the allotted time frame
• Be present and engaging
• Tweet to advertise your poster ("@fancyscientificsocietytwitterhandle Come to poster 114 for a look into mitochondrial dynamics at #bigscienceconference2015")
Resources

- Some departments have their own facilities for printing
  - If yours does not, look into UCLA Mail, Document, and Distribution Services ([http://nowprint.maildoc.ucla.edu/](http://nowprint.maildoc.ucla.edu/))
  - They do large format cloth printing, which is nice if you are traveling with your poster

- [http://colinpurrington.com/tips/poster-design](http://colinpurrington.com/tips/poster-design)
  - Tips, templates, and more

  - Pre-made PowerPoint templates

- [https://galter.northwestern.edu/help/creating-posters-with-powerpoint-windows](https://galter.northwestern.edu/help/creating-posters-with-powerpoint-windows)
  - Step-by-step guidelines for designing a poster with PowerPoint

- UCLA GWC
Works Cited

• Olson, R. Houston, We Have a Narrative: Why Science Needs Story; University of Chicago Press, 2015.