

# PREPARING A CONFERENCE POSTER IN THE SCIENCES

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**Graduate Writing Center, UCLA**



# Outline

- **Writing the abstract**
- **What goes into a poster presentation?**
- **Format of a poster**
- **Presenting a poster**



# WRITING THE ABSTRACT

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# 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

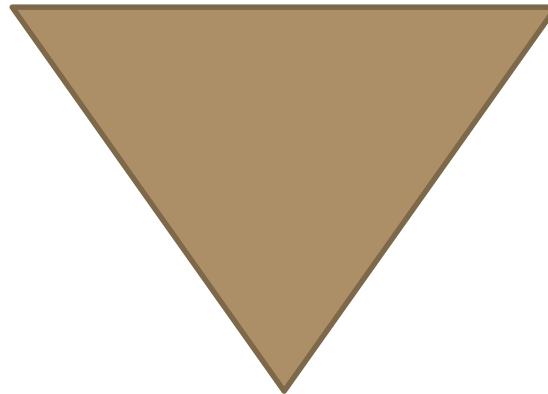
## **Write it first!**

- 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?



# 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?

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# 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

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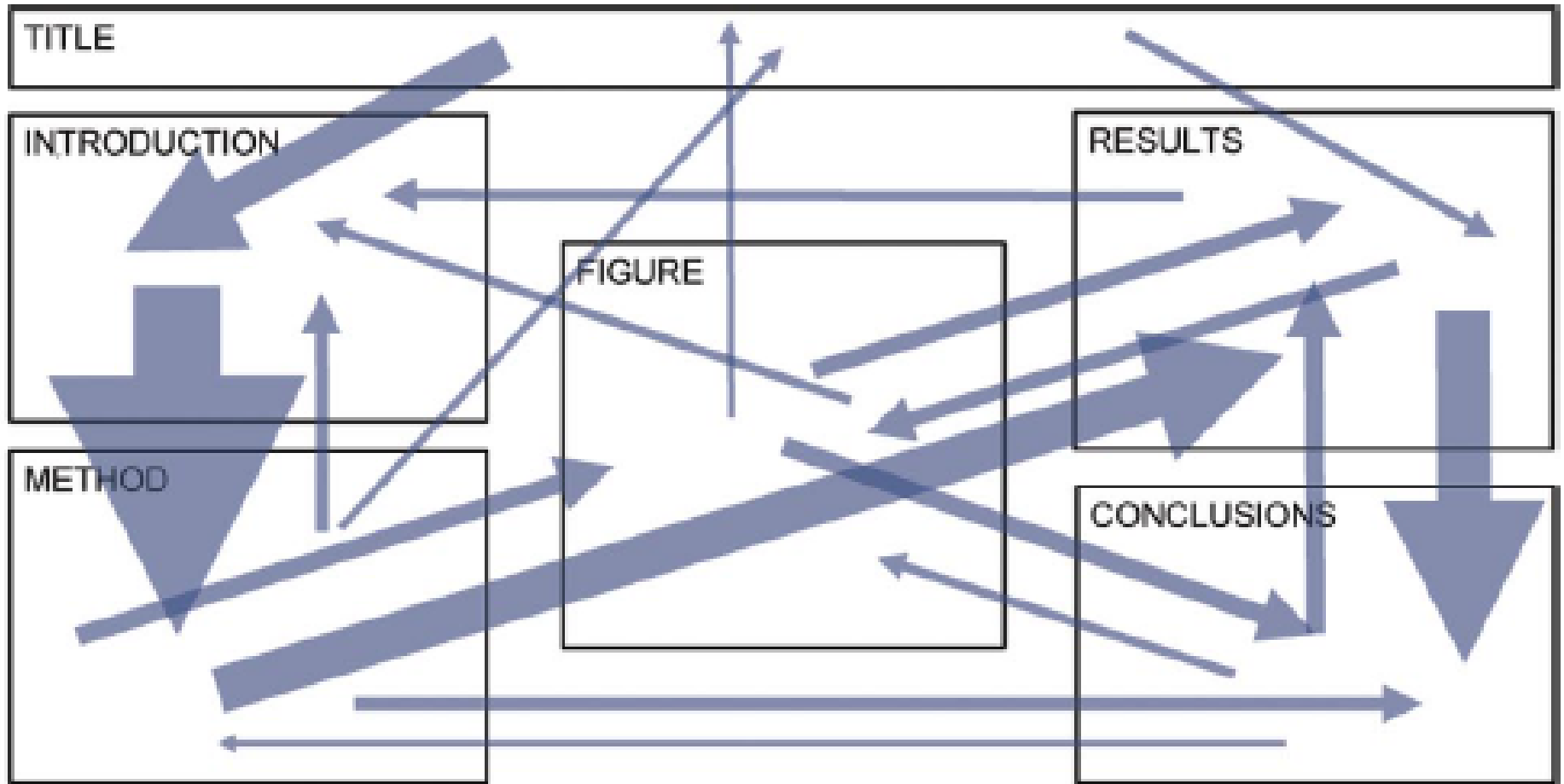
# WHAT MAKES A POSTER EFFECTIVE?

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# What does your audience expect









# Getting creative- what not to do

**PIGS IN SPACE: EFFECT OF ZERO GRAVITY AND AD LIBITUM FEEDING ON WEIGHT GAIN IN CAVIA PORCELLUS**

Colin B. Purrington\*  
6673 College Avenue, Swarthmore, PA 19081 USA

**ABSTRACT:**  
One ignored benefit of space travel is a potential amelioration of obesity, a chronic problem for a growing majority in many parts of the world... (text continues)

**INTRODUCTION:**  
The current obesity epidemic started in the early 1990s with the... (text continues)

**MATERIALS AND METHODS:**  
One hundred male and one hundred female Guinea pigs (*Cavia porcellus*) were transported to the International Space Laboratory in 2011... (text continues)

**RESULTS:**  
Mean weight of pigs in space was 0.3000 ± 0.0002 g. Some individuals weighed less than zero... (text continues)

**CONCLUSIONS:**  
Our view that weight and weight gain would be zero in space was confirmed. Although we have not replicated this experiment on larger animals or primates... (text continues)

**ACKNOWLEDGEMENTS:**  
I am grateful for generous support from the National Research Foundation, Black Hole Diet Plans, and the High Protein Super Association... (text continues)

**LITERATURE CITED:**  
NASA. 1982. Project STS-XX, Guinea Pigs. Unpublished internal memo.  
Sokolov, S.R.; D. P. Lukan; and N. M. Naumovic. 2009. The Fetus Journal Exercise Like An Astronaut: Gravity Loading is Necessary For The Physiological Development During Second Half Of Pregnancy. Medical Hypotheses 44:321-326.  
Laver, M. 1965. Elastase Purchases Accelerate Weight Gain in Case-control Study. Journal of Obesity, 2:23-40.

**Logos:** NRF, Black Hole Diet Plans, The American Dietetic Association, SPACEX.

**Image:** A pig on a scale.

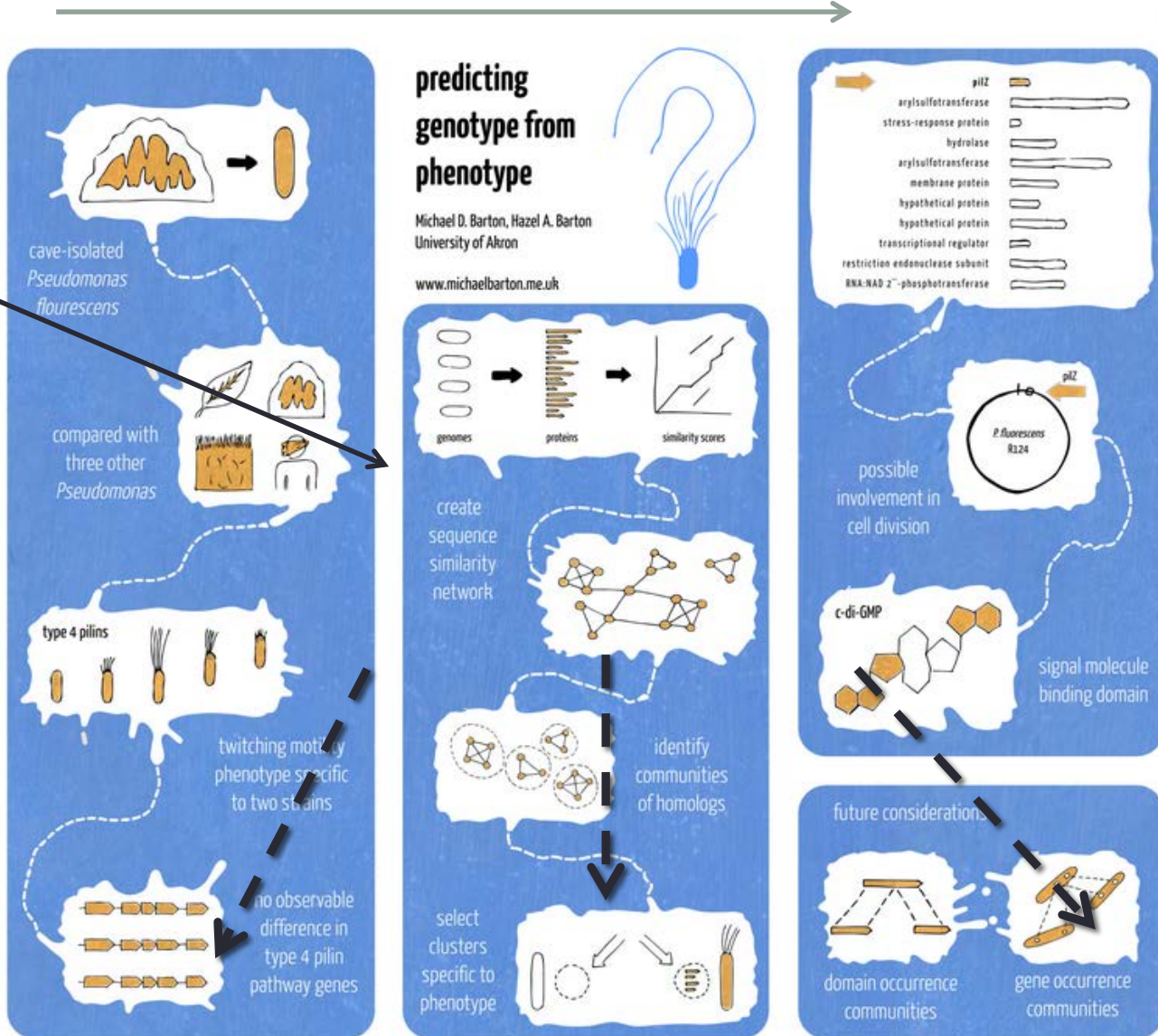
Colin Purrington's example of a 'bad' poster is crammed with text and has a distracting background.

# 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

# 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?



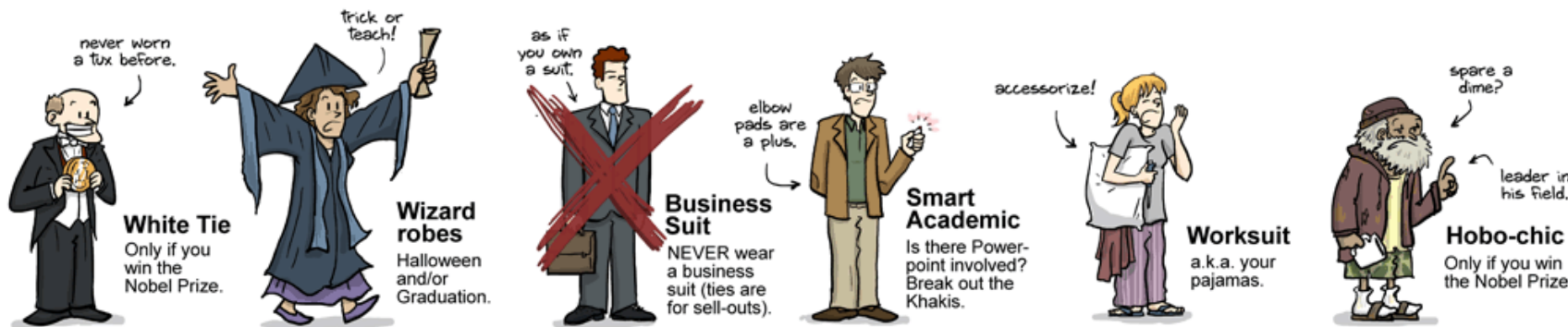
# PRESENTING A POSTER

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# How to dress

## ACADEMIC DRESS CODE



**White Tie**  
Only if you win the Nobel Prize.

**Wizard robes**  
Halloween and/or Graduation.

**Business Suit**  
NEVER wear a business suit (ties are for sell-outs).

**Smart Academic**  
Is there Power-point involved? Break out the Khakis.

**Worksuit**  
a.k.a. your pajamas.

**Hobo-chic**  
Only if you win the Nobel Prize.

JORGE CHAM © 2011

LESS FORMAL →

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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 it's 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





# 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



# Exercise

- Take a few minutes to write an elevator pitch of a project/study that would translate well for a poster

I am interested in protein modification in the mitochondria. I have used traditional biochemical methods to validate known modifications **and** I 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/>)
  - They do large format cloth printing, which is nice if you are traveling with your poster
- <http://colinpurrington.com/tips/poster-design>
  - Tips, templates, and more
- <http://www.postergenius.com/cms/index.php>
  - Pre-made PowerPoint templates
- <https://galter.northwestern.edu/help/creating-posters-with-powerpoint-windows>
  - Step-by-step guidelines for designing a poster with PowerPoint
- UCLA GWC



# Works Cited

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