Intensive Course in Research Writing

Barbara Gastel, MD, MPH
Texas A&M University
Summer 2016

---

---

## Today

- Presentation/discussion: poster presentations
- Presentation/discussion: titles and authors
- Presentation/discussion: writing the discussion
- Workshop (if time permits)
  – Revised drafts of methods sections
  – Plans for the results and discussion sections

---

# Preparing and Giving Poster Presentations

---

## Planning a Poster

- Choose a narrow enough topic.
- Plan to present only highlights.
- Obtain and carefully follow instructions.
- Select images that present key messages and attract viewers.
- Plan to include little text (in general, about 500–1000 words).
- Plan to make the poster understandable on its own.

---

## Organizing a Poster

- Organize the poster logically (example: Introduction, Methods, Results, Conclusions).
- If the poster has a "landscape" format, place the content in about 3 to 5 vertical columns.
- Include plenty of white space.
- In general, don't include an abstract.

## Preparing a Poster: The Title

- Keep the title fairly short.
- Perhaps try to make the title attention-grabbing.
- Use large enough type
  - at least about 2.5 cm, or 1 inch, high
  - in other words, at least 72 point type
- Normally, don't use all capital letters.
  - Example of a Poster Title
  - Example of a poster title
  - EXAMPLE OF A POSTER TITLE

## Preparing a Poster: The Images

- Use images (photographs, flow charts, graphs, etc) that both attract and inform.
- Keep the images simple, so they can be quickly understood.
- In general, use graphs, not tables.
- Make the images large enough.
- Remember to label each image.
- Use color effectively.

## Preparing a Poster: The Text

- Keep the text brief.
- Make the type large enough to read easily (in general, probably about 24 point).
- Where feasible, use bulleted or numbered lists rather than paragraphs.
- If paragraphs are used, keep them short.
- Include your contact information.
- Proofread the text carefully.

## Examples of Posters

## Presenting a Poster

- Don't be shy.
- Think ahead about questions you might be asked.
- Maybe prepare talks of various lengths.
- Perhaps ask some questions.
- Take advantage of the chance for feedback.
- Take advantage of the chance to network.

## Presenting a Poster (cont)

- Have business cards available.
- Consider having handouts.
- Consider having people sign up for further information.
- If you'll write a paper about the work presented, keep in mind comments and questions from the poster session.

## Some Newer Aspects

- Electronic posters
  - Static (projection of traditional posters)
  - Dynamic
    - May have animations, videos, etc
    - May be interactive
- Flash poster presentations (see http://www.authoraid.info/en/news/details/406/)

## Some Resources

- "Designing Conference Posters" by Colin Purrington (posted at http://colinpurrington.com/tips/poster-design)
- "Better Posters: A Resource for Improving Poster Presentations" (blog at http://betterposters.blogspot.com/)

## Titles and Authors of Journal Articles

## Title

- The fewest possible words that adequately indicate the contents of the paper
- Important in literature searching
- Should not include extra words, such as "A Study of" or "Observations on"
- Should be specific enough
- Generally should not include abbreviations
- (Running title: short version of title—appears at tops of pages)

## Mini-Workshop

- Look at the instructions for authors that you brought. What, if anything, does it say about titles?
- Look at the title of the article that you are using as a model. What observations do you have? Consider
  - What's good about the title?
  - Might anything about the title be improved?
- Compare your findings with those of some people near you.
- Be ready to report some observations.

## Authors

- Those with important intellectual contributions to the work
- Often listed largely from greatest contributions to least
- Head of research group often is listed last
- In some fields, listed alphabetically
- Useful to list one's name in a consistent way on every paper

## Corresponding Author

- The author who communicates with the journal and others
- Should be someone readily reachable during review and publication of the paper
- Views vary as to whether it is prestigious to have this role

## Something Fairly New: ORCID

- Stands for Open Researcher and Contributor ID
- "ORCID provides a persistent digital identifier that distinguishes you from every other researcher"
- ORCID identifiers can aid in tracking authors of papers, grants, etc
- Some journals now require use of ORCID IDs.
- See http://orcid.org/

## Mini-Exercise on Authors

- Look at the instructions to authors from your target journal.
  - What, if anything, does it say about authorship?
- Look at the paper that you are using as a model.
  - How many authors are there?
  - Is a corresponding author listed?
  - What else do you notice about the author list?

## Acknowledgments

- Often optional
- A place to thank people who helped with the work but did not make contributions deserving authorship
- Permission should be obtained from people you wish to list
- Sometimes the place where sources of financial support are stated

## Mini-Exercise on Acknowledgments

- Look at a set of instructions to authors.
  - What, if anything, does it say about acknowledgments?
- Look at the paper you're using as a model.
  - Does it contain acknowledgments?
  - If so: What is the content? What is some of the wording?

## The Discussion

## Overall Structure of a Paper:
## Like an Hourglass

## Discussion

- One of the more difficult parts to write, because have more choice of what to say
- Often should begin with a brief summary of the main findings
- Should answer the question(s) stated in the introduction (or address the hypothesis or hypotheses stated in the introduction)

## The Discussion:
## Some Possible Content

- Strengths of the study
  - For example, superior methods, extensive data
- Limitations of the study
  - For example: small sample size, short follow-up, incomplete data, possible sources of bias, problems with experimental procedures
  - Better to mention limitations than for peer reviewers and readers to think that you're unaware of them
  - If the limitations seem unlikely to affect the conclusions, can explain why

## The Discussion:
## Possible Content (cont)

- Relationship to findings of other research—for example:
  - Similarities to previous findings (your own, others', or both)
  - Differences from previous findings
  - Possible reasons for similarities and differences

## The Discussion:
## Possible Content (cont)

- Applications and implications—for example:
  - Possible uses of the findings (in health care, education, policy, industry, agriculture, etc)
  - Relationship of the findings to theories or models:
    - Do the findings support them?
    - Do they refute them?
    - Do they suggest modifications?

## The Discussion:
## Possible Content (cont)

- Other research needed—for example:
  - To address questions still unanswered
  - To address new questions raised by the findings
- Other

## Discussion (cont)

- Typically should move from specific to general, rather like an inverted funnel (opposite of introduction)
- In some journals, may be followed by a conclusions section
- In some short papers, is called "Comment" rather than "Discussion"

## The Discussion: A Mini-Workshop

- See what, if anything, your target journal's instructions to authors say about the discussion.
- In the discussion section of the paper you're using as a model, notice items such as
  - Length
  - Types of content
  - Organization
  - Phrases used
  - Citation of references
- Use this discussion section and others in the same journal as models.

## Workshop (if time permits)

- Revised drafts of methods sections
  - Tell your group members some of the changes you made in revising your methods section. If opportunity allows, obtain feedback.
- Plans for the results and discussion sections
  - Describe the planned content and structure of your results and discussion. Obtain feedback.