

Presenting Research Results

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Presentation of research results

- A key component of scientific research is presenting research results to the scientific community
- Research results are presented in three main formats: oral presentation; poster presentation; written paper.
- LS-LAMP participants give oral presentations and turn in written papers

Introduction

- The *Introduction* provides background information on the problem to be investigated
- It should describe the current state of knowledge about the problem
- The *Introduction* should conclude with a clearly stated study *hypothesis* and its experimental expectations

Methods

- The *Methods* section should describe procedures used in testing the study hypothesis.
- Procedures should be described in sufficient detail that they can be repeated by others
- Materials, equipment, analytical and statistical procedures should all be described in detailed under *Methods*

Results

- The *Results* section is a summary of the experimental outcome of the study.
- *Results* should include a concise verbal description of the outcome as well as tables and figures, showing statistical results and experimental error.
- Tables and figures should include legends explaining what they are summarizing

Discussion

- The *Discussion* section is where the results are interpreted and conclusions are drawn
- The *Discussion* should also compare the results to those of other studies and give the general significance of the findings
- Study limitations, sources of error, and plans future work are usually presented in the discussion

Acknowledgments

- It is important to acknowledge all contributors to the study, including your research mentor, your mentor's research associates, computer consultants, and funding sources
- You should also acknowledge any businesses, organizations or institutions that donated equipment or material for use in the study

Oral presentation

- The format for an oral scientific presentation is essentially the same as that of a scientific paper (more about this later).
- The presentation should include the following sections: introduction, methods, results, discussion, and acknowledgments

Poster Presentation

- A poster presentation contains the same basic information as an oral presentation, but the information is arranged on a large sheet of paper (generally 4' x 3').
- The information is presented in blocks of text (be concise) and figures.
- Arrange blocks in columns from upper left, down to lower right, concluding with acknowledgements

Tips for giving your presentation

- Look professional.
- It is important to address your audience when speaking
- If necessary, use note cards or text on slides to (talking points) organize your presentation
- Rehearse your presentation in front of your mentor or his/her research associates
- Leave at least 3 minutes for questions

Poster presentation

- Stand in front of poster and greet onlookers:
“Hello. My name is...I am a student from
...Would you like to hear about my research?”
- Try to explain information in your own words
without reading (you know what you did).
- Give background, hypothesis and important results
and conclusions.
- Explain images and graphics.
- “I would be happy to answer any questions you
might have.”

Presentation software

- Use Microsoft Powerpoint or similar computer software to produce your presentation (slides or transparencies)
- The software will enable you to choose backgrounds; import tables, graphs and images; even animate the presentation
- Computer projection equipment will be provided

Title of your presentation

Your Name

Your University

The LS-LAMP Program

Introduction example

- Current thinking in game theory was strongly influenced by Forrest Gump, who compared chocolate selection to life in general, coining the indelible phrase “You never know what you’re gonna get”



Research Paper

- The research paper you submit should have the same general format as your oral presentation
- All literature *used* should be cited (by author and publication year) in the text with complete bibliographic citations at the end of the paper (*References*)
- Consult *Journal of Young Investigators* for instructions <http://www.jyi.org/submissions/index.html>