



2012 **ALL NATIONS** Louis Stokes **ALLIANCE** for **MINORITY PARTICIPATION**

Poster and Oral Showcase for Undergraduate Research

*The All Nations Louis Stokes Alliance for Minority Participation (**ANLSAMP**) will host its annual Poster and Oral **STEM** Undergraduate Research Competition. Students may compete in either the Poster and/or Oral presentation categories. Presentations will be judged by a panel of judges and scored with prizes awarded to the top three competitors in each category.*

The following Suggested Guidelines for Poster and Oral Presentations and the separate 1-page Poster/Oral Undergraduate Research Competition - Registration Form are available by contacting Lee Padilla, Projects Coordinator, at lee_padilla@skc.edu, or by visiting the AIHEC Conference website.

*ANLSAMP's goal is to double the number of American Indians achieving Bachelor degrees in Science, Technology, Engineering and Mathematics (**STEM**). The National Science Foundation funds ANLSAMP.*

Suggested Guidelines for Poster Presentations

The goal of your scientific poster is to have an organized and attractive presentation of your research findings. Posters should be self-explanatory and readable. In addition, when fabricating your poster, please consider using the following suggested guidelines.

1. **Title:** At the top of your poster you should have a title that is both short and very descriptive of your project. For empirical studies, the title should also mention the organism(s) studied. As a rule, the title should be easily readable at a distance of about 4 – 5 feet away (words are approximately 1.5 – 2.5 cm in height).
2. **Name Affiliation:** Directly under the title, you should have your name, your faculty sponsor's name, and your school's name. The name and affiliation section is usually about 20-30% smaller than the title.
3. **The body of the poster:**
 - a. **The Abstract:** This is a brief synopsis of the entire work, described in the poster. Most abstracts are one or two paragraphs in length. The abstract should be understandable without reading the entire poster and the reader should be able to decide if s/he would like to read the entire poster based on what they read in the

abstract. The abstract should contain the following elements: (1) the purpose of the study, (2) a brief statement of what you did, (3) a concise statement of the major findings, and (4) the major conclusions. Do not include details of the methods.

- b. **Introduction:** The purpose of the introduction is to present the question being explored by your research and to place it in the context of current knowledge about the topic. It often works well to start with the general context and work your way down to the specifics, ending with a precise statement of the question or hypothesis being addressed by your study. The introduction should convince the reader of the significance of your study. To do this well in a poster is a challenging requirement. Be brief, but include the important points to be sure the reader sees the relevance of your work.
- c. **Methods:** In this section you should describe all procedures that you performed. Describe your methods in sufficient detail to allow a reader who works in your field to understand that you did to collect your data. Illustrations are appropriate for complex experimental design, etc.
- d. **Results:** The purpose of this section is to summarize the data. Report the results of any statistical tests here. Present all of your results, whether positive or negative. A table or figure may substitute for a written summary as long as each table or figure has a legend that explains the graphic clearly.
- e. **Discussion:** In this section you should interpret the meaning of your results with respect to the original question. You should interpret your results without repeating them. The discussion must include your conclusions about the answers to the questions that motivated your research that you described in the introduction. If appropriate, mention explanations for unexpected results.
- f. **Literature Cited:** This section is optional in the poster, unless citations are used in the text. Include only those papers cited in the text. Do not cite a paper unless you have read it yourself. Cite all your references in the text and list them in the literature-cited section using a format from a major journal within your discipline.

4. Graphics, Tables, Photos and Others

Illustrations, tables, figures, photographs, and diagrams need to have unique identification numbers and legends. In the text, use the numbers to refer to specific graphics or pictures. In your legends, include a full explanation and where appropriate, include color keys, scale, etc.

5. Sample Layouts

There are an endless number of ways to put a poster together. Remember try to create a strong visual but, avoid making the poster look crowded. It is important to provide some indication of the flow of the poster (top to bottom, left to right). Some posters have numbered sections (units) to indicate the reading order.

One entire poster should take up a space no larger than 80cm by 120cm (approximately 32" by 48"). All posters will be affixed to and displayed on a vertical surface (e.g. wood, foam board, cork board). You should determine how to secure your poster to such a surface and bring whatever materials you will need to do this. You may build your poster upon a single piece of poster-board or it may be made up of several individual components that can be secured to the display surface. We encourage you to be imaginative and creative, so long as you follow the guidelines in this document. Remember that the purpose of the poster is to convey information from your research. Use care that the display does not overpower the scientific content. Also, check your text and legends for accuracy. Be sure to italicize Latin words, label graphs, tables and have several people proofread your poster.

If you decide to make each of the above components of the poster a single unit, the smallest unit should be no smaller than 17.5cm by 20.5cm (approximately 7" by 8"), except for literature cited and for the title and Name sections that are, by necessity, linear in orientation. It is fine to group more than one required element on a single unit as long as your poster is clear and readable and does not look cluttered. Unless otherwise directed in the above sections, the text font size is to be no smaller than about 3-4mm in height for an upper case letter (for example: 12 point font in Times New Roman). Times Roman is difficult to read at a distance. Helvetica has sharply delineated letters (no curlicues) and thus, is easier to read at a distance. There are many other font options for you to choose from but you must make sure they are comparable to the Times New Roman 12 point font size.



Suggested Guidelines for the Oral Presentations

Time Allotment

You will have a maximum of 20 minutes for your presentation and up to 10 minutes for questions and answers. Organize and practice your presentation so that it fits consistently within the 20-minute allotment. It is important that you not exceed your allotted time. The session moderator will interrupt you if you exceed your 20-minute limit.

There are three basic sections to an oral presentation: The introduction, the body, and the summary.

1. The Introduction

You should begin by introducing yourself and stating the degree you are seeking and the institution you attend. The remainder of your introduction should tell your audience exactly what you will be covering and clearly state the purpose of the presentation. As a rule of thumb, the introduction should not be longer than the first 2 minutes. The purpose of the introduction is to present the question being explored by your research and to place it in the context of current knowledge about the topic. It often works well to start with the general context and work your way to the specifics, ending with a precise statement of the question or hypothesis being addressed by your study.

2. The Body

The body of your presentation contains the factual support for your purpose. Avoid ambiguity when you discuss your methods, results, or interpretations and be clear and concise. You should develop your talk logically. Emphasize the main points and keep auxiliary or background information in proper perspective. Your visual aids should be directly related to your topic and help you to make your presentation more clear, instead of just longer. Describe your methods in sufficient detail to allow a person in the audience who works in your field to understand what you did to collect your data. Include a discussion of your answers to the questions that motivated your research and that you described in the introduction. When appropriate, mention any alternative explanations for your results and mention possible explanations for unexpected results. Tables and figures should not substitute for a verbal summary, but are often “general suggestions”. Be sure to orient the audience to your visual arts. For example, always explain the scale of a photograph, the axes of a graph, the column headers of a table, etc.

3. The Summary

If your audience remembers any part of your talk they will remember the introduction and the summary. A good summary is a brief reiteration of the purpose of your presentation and a vivid restatement of your main points. You should include only the

critical points you want your audience to remember. At the end of your summary you should ask the audience if they have any questions or comments.

General Suggestions

Use of Notes

Some people read their presentations and this often makes for a very flat delivery. Remember a lecturer from your past that read one of her/his lectures for 40 minutes! Other people try to memorize their presentation, which often makes for a very stiff and tense presentation. This person might get very distraught if they did prepare and attempt to memorize the answer to every possible question that might come from the audience. The majority of good presenters use notes. You might try using notes printed on 3" by 5" cards. Cards are relatively inconspicuous and easy to hold. To avoid the tendency to read from notes, limit them to key phrases that bring to mind several sentences or an entire section of your presentation. You may also want to use the notes feature of your PowerPoint program to print the notes under each slide on your printout to ensure you are talking about the information that is shown on the screen to the audience.

Use of the Podium

There will be some type of podium or lectern provided for your presentation. Standing behind the podium will give a formal air to your talk while moving away will establish a friendlier relationship with your audience. Both of these styles are acceptable, so decide which will be more comfortable for you.

Visual Aids

There are various media available for visual presentations. **We have required that all Oral presentations be in Microsoft PowerPoint format. Please note that your presentation will be given on our AMP PC so ensure compatibility, especially if you do your presentation on a Mac.** Visual aids are very effective communication tools and are essential in virtually every presentation. The majority of what your audience absorbs from your presentation will come from the visual presentation that you use. Therefore, you will increase the probability of maintaining your audience's attention and interest if you use visual aids wisely. Your presentation will be loaded onto a laptop computer at the **ANLSAMP** office and we will have the laptop and projector setup for you. You may bring your most current PowerPoint presentation with you on a jump drive. You will have a remote control to use for moving through the presentation. We also intend to supply a laser pointer for your use, but please bring one, if you have one, in case ours fails.

A good visual aid should:

1. Aid to clarify, reinforce or highlight an idea. It should be relevant to the subject of your presentation.
2. Be easy to read. Keep the content simple. Avoid complicated graphs or tables.
3. Be brief. Four or five lines with no more than six words per line are a guideline for a good textual visual aid. Your audience should be able to read and absorb the content within two minutes. You should spend the first fifteen to twenty seconds of that time just focusing the audience's attention on your slide and explaining the layout.
4. Not overwhelm the audience with detail or color. Use color to highlight particular points or to group related items.

5. Present only highlights. A good visual aid will supplement, reinforce, and aid spoken material, not take its place, detract from it, or overwhelm it.
6. Be accessible and easily visible to the audience.

Handouts

If you would like the audience to have handouts of your presentation please bring 10-15 copies with you. We will not be able to make copies of your handouts for you.