

## The Scientific Paper (or Poster) Checklist

### Title

\_\_\_ Does the title give an accurate preview of what the paper/poster is about? ( *i.e. Is it informative, specific and precise?*) 3 pts

### Abstract

\_\_\_ Are the main points of the paper/poster described clearly and succinctly? 3 pts

### Introduction

\_\_\_ Does the Introduction have a logical organization? *Does it move from the general to the specific?* 5 pts

\_\_\_ Has sufficient background been provided to understand the paper? *How does this work relate to other work in the scientific literature* 5 pts

\_\_\_ Has a reasonable explanation been given for why the research was done? *Why is the work important? What is its relevance?* 5 pts

\_\_\_ Is the final paragraph a brief description of the hypothesis/goals and findings of the paper? 5 pts  
*Note: In cell and molecular papers, the final paragraph of the introduction is a brief summary of the findings of the paper. This format may be a different from that of other areas of biology or chemistry.*

### Materials and Methods

\_\_\_ Could the study be repeated based on the information given here? 4 pts

\_\_\_ Is the material organized into logical categories? 4 pts

The materials and methods should be a source of detail about the experimental approaches of the authors. Procedures that have been repeated by the authors should only be listed once. Variations to the procedure should be briefly summarized. *(The M&M should not read like a recipe).*

### Results

\_\_\_ Is the content appropriate for a results section? 10 pts

- Simple introduction to the scientific question
- Brief description of the methods
- Clear description of the results for each experiment
- analysis of those results

\_\_\_ Are the results/data analyzed well? 5 pts

- Given the data in each figure, is the interpretation accurate and logical?
- Is the analysis of the data thorough or are some aspects of the data ignored?
- Does the author make connections between different sets of data within the text?
- Are the data interpreted in a larger context?

\_\_\_ Figures 5 pts

- Are the figures appropriate for the data being discussed?
- Are the figure legends and titles clear and concise?

*Note: The entire experimental findings of a paper should be apparent from reading the results section. It should be possible to understand the question the authors are asking, the experimental approach they use to answer the question, the results of those experiments, and basic analysis of the data. Larger issues of what the research means, how it relates to other work, etc should be included in the discussion.*

**Discussion**

\_\_\_ Does the author clearly state whether the results answer the question? (*i.e. support or disprove the hypothesis?*) 5 pts

\_\_\_ Were specific data cited from the results to support each interpretation? *Does the author clearly articulate the basis for supporting or rejecting the hypothesis* 5 pts?

\_\_\_ Does the author make connections between data sets within the paper/poster? 5 pts

\_\_\_ Does the author adequately relate the results of the current work to previous research? 10 pts

**References:**

\_\_\_ Are the references appropriate and of an adequate quantity? 5 pts

\_\_\_ Are the references cited properly (both within the text and at the end of the paper)? 5 pts

**Writing Quality**

\_\_\_ Is the paper well organized? (Paragraphs are organized in a logical manner) 7 pts

\_\_\_ Is each paragraph well written? (Clear topic sentence, single major point) 7 pts

\_\_\_ Is the paper generally well written? (Good use of language, sentence structure) 7