

- I. Title Page**
 - A. Title Page information
 - B. Running Title
- II. Abstract/ Summary**
 - A. General statement and set up of system
 - B. Question or hypothesis to be tested
 - C. Results
 - D. Conclusions
- III. Introduction**
 - A. General Statements about the system
 - B. Importance of the system
 - C. What is known
 - D. What is controversial or undefined
 - E. Hypothesis or questions that are to be addressed in the manuscript
 - F. Approach
 - i. Special reagents
 - ii. Technology
 - G. High points of the paper and overall conclusions
- IV. Materials and Methods**
 - A. Reagents
 - i. Cells
 - ii. Antibodies
 - iii. Nucleic acids
 - iv. Etc
 - B. Procedures
 - i. Brief description or reference to procedure
 - ii. Details of new procedure or new way of using a procedure
- V. Results**
 - A. Overall set up or defining the system
 - B. First series of experiments
 - i. Why is the experiment being performed?
 - 1. Testing an hypothesis
 - 2. Answering a question
 - ii. The approach
 - 1. Special reagents
 - 2. Technology or procedure used
 - iii. The result - the Figure or Table
 - iv. Interpretation of the result
 - 1. this suggests (demonstrates or proves) that
 - 2. alternative interpretations

- C. Second series of experiments
 - i. Why?
 1. Distinguishing between the alternative explanations?
 2. The above data suggest...
 - ii. Repeat the motif in B.
 - iii. More figures and tables
- D. Additional results sections

VI. Discussion

(Below are potential items to consider including in your manuscript. Note not all will be applicable.)

- A. Summary of the highpoints (this is usually presented, although some find it repetitive; thus make it short).
- B. Model developed from experimental data (if applicable)
 - i. May include a figure
- C. Explanation of Model
- D. Alternative interpretations of model
- E. Justification for your interpretation
- F. Interesting conclusions about your work
 - i. Relationship of your conclusions to the work of others
- G. Change in paradigm due to your results
- H. Other interesting conclusions about your work
- I. Placement of your work in the grander scheme of biology (this can also go at the beginning)

VII. Acknowledgements

- A. Those who provided some guidance to the work.
- B. Those who provided reagents
- C. Agencies that provided support (very important).

VIII. Literature Cited

(be sure to check journal format)

IX. Figure Legends

- A. Figure 1
 - i. Concluding statement about the figure
 - ii. Description of the experiment and any information that may not have been in the materials and methods
 - iii. Conclusions based on the data. This is requested by some journals
- B. Figure 2, etc.

X. Tables

- A. Tables do not have figure legends so they must be clearly marked

- B. Use superscripts to define columns, rows, or items that will be unclear

XI. Figures

- A. Should be large enough so that the reviewer and the reader can see the data.
- B. Lettering should be at least one size larger than you think it should be so that when it is reduced, it will still be easy to read. **Use san serif fonts.**
- C. Label the figures on the back so that the reviewer and publisher can tell which is which.
- D. If you have photos or autorads, print these on high quality paper or provide real photographs for the reviewers. After all, you want them to be able to appreciate the beauty of your data.