Peer-reviewed scientific studies are the ‘gold standard’ of information in science. These papers are the way scientific understanding advances in any scientific field. As a scientist-in-training, you must become familiar with reading and, eventually, writing them. Reading and understanding a peer-reviewed scientific study requires a higher level of critical thinking and scrutiny than reading general science articles. Here I want to help you develop the skills necessary to interpret peer-reviewed papers by assigning you a relatively brief paper to review.

The peer-reviewed scientific paper you will be reviewing:


**Assignment**

1. Summarize the general issues addressed in the paper.
2. Give an overview of the introductory information in the paper, which states why the questions that are addressed in the study are of interest.
3. Present the hypotheses being tested, or the questions being addressed.
4. Describe the field location(s), and describe the sampling procedure(s).
5. Describe the organisms or the systems which are being studied.
6. Clearly identify the independent variable (or variables).
7. Clearly identify the dependent variable (or variables) they measured.
8. Which variables did they try to keep constant? Were there any controls in their experiments? If so, identify them.
9. Briefly describe the results of the study. Do this by interpreting and summarizing the figures and tables.
10. Then, evaluate the meaning of the results. If the authors have done this in their paper, then paraphrase their interpretations.
11. What conclusions did the authors draw about their study?
12. What has the study has contributed to the understanding of the topic?