

How to read a scientific paper

BIO311 03/02/2017

What is primary literature?

What is peer review?

Learning objectives for today

- How are papers organized?
- How do I read a paper (especially in an area I am not familiar with)?
- How do I understand and evaluate the paper's scientific content content?

Exercise 1: Paper organization

- A. Look over the paper. Write down where the paper was published.
What are the main sections of the paper?

- B. Look at a section in more detail.
 - What section did you choose and why?
 - What is the purpose of the section your group looked at?
 - What type of information do you find in this section?

Exercise 2: How to read and understand a paper

Take a moment to look through the Spellman paper once more. Answer the following questions. Write down which section in the paper you found the answer.

1. What question did the paper address?
2. What are the main conclusions?
3. What evidence supports these conclusions?
4. Why are the conclusions of the research important?
5. Do the data actually support the conclusions? Why or why not?

Exercise 3: Terms and definitions (how to understand a paper)

- Write down three terms from the paper for which you did not know or understand the definition.
- Let's go through some of these terms.

Exercise 4: Citations

- Look at the citation on the screen. What is missing? Look up the reference and fill in the missing information.

How to cite a scientific paper

- What are inline citations?
- What are references?
- Why is it important to cite appropriately?