Reading the primary literature in biology

Brigid O’Donnell
brigid21@gmail.com
A couple pointers on how to read a paper:

1. Make sure you are using primary literature…
   How can you tell?
Tips for thoroughly reading a research article

1. Ask questions as you read.

2. Use a strategy: Abstract, Skim, Read thoroughly.

3. Jot down notes in the margins

4. Circle words/terms you don’t know & consult a scientific dictionary

5. Read the article at least three times over.

6. Spend a lot of time poring over the figures.

7. Understand the informative vs. persuasive aspects of papers.
Informative vs. Persuasive Aspects of Research Articles….

1) Introduction

2) Materials and Methods

3) Results (incl Figures)

4) Discussion/Conclusions
Informative vs. Persuasive Aspects of Research Articles....

1) Introduction

2) Materials and Methods

3) Results

4) Discussion/Conclusions

Experimental Narrative
Informative vs. Persuasive Aspects of Research Articles....

1) Introduction

2) Materials and Methods

3) Results

4) Discussion/Conclusions

Experimental Narrative

INFORMATIVE
Informative vs. Persuasive Aspects of Research Articles….

1) Introduction

2) Materials and Methods

3) Results (incl Figures)

4) Discussion/Conclusions
**Informative** vs. **Persuasive** Aspects of Research Articles....

1) Introduction

2) Materials and Methods

3) Results (incl Figures)

4) Discussion/Conclusions
The persuasive parts of the paper (particularly the discussion) are the places where you should think about what the author is trying to convince you of.....
The persuasive parts of the paper (intro & discussion) are the places where you should think about what the author is trying to convince you of.....

This is where you can disagree with or critique the interpretation of the findings!
The persuasive parts of the paper (intro & discussion) are the places where you should think about what the author is trying to convince you of.....

This is where you can disagree with or critique the interpretation of the findings!

A strong “critique” paper has thoughtfully explored the author’s choice of methods and her interpretation of the data.