

HOW TO DISSECT A PAPER

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OVERVIEW:

1. Look at the title and authors
2. Read the abstract
3. Look at the figures to assess quality (If they don't look good, keep this in mind when assessing the paper)
4. Read the last paragraph of the introduction which will give you the objective, the rationale and the approach
4. Read the first paragraph of the discussion which will give you the objective, approach and major conclusion(s)
5. Read the last paragraph of the discussion which will give you the implications and possibly future directions.
6. Now read the paper through from beginning to end and critically analyze the paper.
7. You might also want to look through the reference titles for additional info or other papers that might interest you.

WHEN DISSECTING A PAPER:

ASK YOURSELF:

1. What is the overall objective of this paper?
2. What is the approach?
3. What is the point of each figure or group of figures?
4. What do the data actually prove?

Note- Figures which do not address objectives of the paper may be extraneous and could be eliminated or just mentioned in passing in a short presentation)

5. Are the conclusions in the paper supported by the actual data or are alternate conclusions appropriate?
6. What might you do next given their data?

REMEMBER:

-Just because a paper is published, doesn't mean it is correct

-A paper may have excellent data but incorrect (or skewed) conclusions. Base your future experiments on what the data show and not necessarily on the authors' conclusions. This is often a good place to start on new exciting experiments. Another good place for ideas on future experiments is the last paragraph of the paper.