Lecture 3: Learning Open Science

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Pregistration

- What is it?
- How to do it?
- Pros
- Cons
- Should you?

Different New Things

- Replication: Find an experiment. Do it again. Better.
- Registered Report:
    - Write intro, background, hypotheses, methods
    - Get them reviewed, paper accepted/rejected w/o data
    - If accepted, get data
- Preregistration:
    - Write a registered report to yourself
    - Focus on hypotheses and methods
    - Record it somewhere public

- There is a lot of advise
- I wouldn't listen to any of it
- Just write your most honest story
- Record your best judgment at this moment

Advantages To You

- Sometimes by writing now, you realize you have a conceptual mistake. Usually, hypotheses do not line up with methods.
  - New models are needed
  - Different expt is needed
  - You realize before getting data that the endeavor does not tell a good scientific story.
- It is nice to point to a preregistration when trying to publish

Disadvantages To You

- It takes some people quite a long time. They get all beaurocratic.
- Great way to cause self doubt and fear. Another standard to compare yourselves to others.
- Then, the worst possible thing will happen, you will have to break your preregistration

My Advise

If you decide to preregister:

- use it to your advantage only
- know when to get off
- be prepared to break it