SOURCES OF INSPIRATION:
DEVELOPING YOUR OWN RESEARCH QUESTION
What is the source of scientific knowledge?

“Experiment, itself, helps to produce these laws...But also needed is imagination to create from these hints the great generalizations — to guess at the wonderful, simple, but very strange patterns beneath them all, and then to experiment to check again...”

-- Richard Feynman
Hypothesis Generating Tips

McGuire’s 49 creative heuristics:

1. Recognizing the oddity of day to day occurrences
2. Analyzing one’s own behavior, role playing it later
3. Observation of study participants, intensive case studies
4. In your data, finding serendipitous interaction effects
5. Looking for the contrary of a trite prediction
6. Take a variable or hypothesis and push it to an extreme or zero
7. Allowing open-ended responses for content analysis
8. Disrupting ordinary states of consciousness...

When do you have moments of scientific creativity?

Sources of inspiration: My experience

- Going to scientific talks where I disagree or where my intuition is different.
- Talking with other behavioral scientists.
- Having two unrelated sets of ideas, theories or approaches in my head at the same time.

When does inspiration strike (me)?

Always write down any ideas you have. Apply ideas from this class to your questions.
Beyond that...it is up to you.

This class will introduce you to some tools to use once you HAVE an inspiration.

Tools to test the truth value of your hypothesis.
Assignment for Tomorrow

Write down:

1) An effect that interests you: $A \rightarrow B$
2) A circumstance that makes the effect larger or smaller (when does $A$ have more, or less, of an effect on $B$)
3) WHY does this effect exists, what process is responsible? (Mediator variable influenced by $A$ that influences $B$: $A \rightarrow M \rightarrow B$)

Ex: Lack of contact with other Blacks
   $\rightarrow$ race related reasons for attending an HBCU
   $\rightarrow$ race-related behavior intentions at college

Be prepared: to pitch your idea to a classmate as something worth pursuing.