## The final hurdle: the Research Proposal

Completed in "co-investigator" groups (i.e. lab partners)

• 12 minute talk (every word counts!)

- Propose a <u>novel project</u> to advance the field of biological engineering
  - Tangentially related to 20.109 via techniques or concepts
  - Can have computational component, but that cannot be the focus

## Deciding on your topic and drafting your research question

















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## How do you know if you have a novel project?

- Look at the most recent discoveries in the field you decide on as a group
  - What is the most recent advancement?
  - What do other scientists say is the biggest unanswered question?
- Start with the most recent literature on your topic
  - Look at the Discussion/Future Works section to identify knowledge gaps the authors point out
- Take that gap and figure out how you can apply a new perspective to solving the problem
  - Not enough to just follow up on the paper using similar methods

## What are we doing today?

- Talk about the proposal presentation
- Hear about research from Amanda and Ben
- Brainstorm with your co-investigators to identify topic areas of interest
- Hear about research and identifying a novel research idea for a grant proposal from Kylie
- Re-group and continue to work on developing your own proposal ideas