

# Talking about your Research



PiNBAC Workshop | 09.19.22 | Tari Tan

# Components of the Semi-Annual Research Updates:

**Introduction and significance:** Briefly introduce the “big picture” context for your research and identify the specific research question that you will be studying. State why that research question is important/significant to study.

**Experimental approach:** Describe the experimental methods that you are using or plan to use to answer your question. Where possible, explain why those methods were chosen and/or what types of information each approach provides. (In other words, what can you learn?)

**Data and/or possible results:** If you’ve already started collecting data, what results have you gotten, and what have you concluded from those results? If you haven’t yet started collecting data, briefly describe the types of data you’ll be collecting, the types of results you might obtain, and how you would interpret those results.

**Next steps:** What is your plan for the upcoming months? What experiments or learning experiences in the lab are you prioritizing? What are your general goals that you hope to achieve before your next research presentation (which will happen early spring)?

*Aim for a presentation of ~20-30 minutes long*

# General Considerations

- **Consider the audience.** Make sure you are able to explain your project to non-experts.
- **What is your goal?** Maybe you're just hoping to share your work, but maybe you want specific types of feedback on your presentation and/or science. If so, tell us, and structure your presentation accordingly.
- **General Considerations for slides:**
  - You should be able to summarize each slide in one sentence (i.e. one main idea per slide)
  - Be sure you're able to explain anything that you put on the slides
  - It always takes longer to explain things than you think (estimate ~ 2 minutes/slide as a starting point; adjust based on your own preferences for slide design and speaking style)

# A Sample Presentation



Structuring your Semi-Annual Research Update

# Introduction and Significance

- Start BIG picture. Think of an inverted pyramid (most general at top, narrowing down to specific research question)
- After presenting your specific research question, introduce your hypothesis/es
- This isn't a comprehensive lit review; only provide the information that is necessary 1) to set up the significance of (and motivate) the research question, and 2) for the listeners to be able to follow along with your presentation

# Experimental Approach

- Introduce the methods and say why you're using those approaches. Provide brief explanations for how each method works.
- Include a discussion of control conditions, what you will measure, how you will analyze your data (e.g., what comparisons will you be making)

# Data and/or Possible Outcomes

- Tell us what you might observe and what conclusions you will draw from different possible outcomes. (Advanced level is to be able to consider outcomes that both would and would not support your hypothesis)
- If you are presenting data, make sure to take the time to walk the audience through each data figure (even the basics - e.g., describing colors in the figure, or the x/y axes, etc.)

# Next Steps

- Outline what your priorities are for the next few months
- This is your chance to solicit specific feedback on your research project

# Acknowledgements

- Recognize the people with whom you are working (e.g., your lab, your PI) and anyone else who you feel has contributed