Final Group Task: "Pitch Your fMRI Study to a Funding Agency"

Apply everything you've learned in the workshop to **design and present** an fMRI study—from data acquisition to analysis strategy—targeted to address a meaningful cognitive neuroscience question. Your goal is to *convince a (fictitious) funding panel* to fund your study.

The Scenario: You are a neuroscience research team preparing to submit a grant to the **Brain Imaging Research Council**. You have **10 minutes** to pitch your fMRI study idea. The panel wants to see that you:

- Understand fMRI methodology
- Can justify your design choices
- Know how to analyze and interpret fMRI data (both univariate and multivariate)
- Have a compelling scientific question

Required Elements

1. Research Question + Hypothesis

- What do you want to study with fMRI? (e.g., color perception, decision making, memory)
- Why is this important?

2. MRI Data Acquisition

- What kind of data will you acquire? Anatomical + Functional
- What are your stimuli and tasks?

3. Preprocessing Plan

- Briefly explain what preprocessing steps you'll apply and why (motion correction, normalization, etc.)

4. Analysis Strategy

Split into **univariate** and **multivariate** approaches:

- **Univariate (GLM-based):**
  - What contrasts will you use?
  - What will your activation maps test?
  - Will you examine group-level effects?
- **Multivariate (MVPA):**
  - What classification will you do? (e.g., decode condition, task, stimulus)
  - What's your hypothesis about classification accuracy?
  - Will you use RSA? What model RDMs will you compare?

5. Interpretation Plan

- What kind of results would support your hypothesis?
- What would classification accuracy or RSA results tell you?

Presentation Format: Blitz Talk (12 min max)

- **Target audience**: Neuroscientists but also researchers from other disciplines
- Use 10 slides max
- Focus on clarity, creativity, and strong scientific rationale
- You may use visuals