Memory for the past serves a **prospective** function: to predict future events\(^1\).\(^2\).

**Question 1:** How do we flexibly generate predictions at multiple timescales?

**Question 2:** How are predictions updated when our environments change?

**Introduction**

Participants predicted upcoming events from the day 1 maps along multiple timescales with comparable accuracy, but were slower for further rooms.

**Hypotheses**

**Prediction at Multiple Timescales**

**Prediction Updating**

**Prediction by Integration Subtype**

Activity patterns during the blank period should resemble those for upcoming rooms, though in some regions this prediction may not be context-specific. The timescale of prediction will be longer for progressively more anterior brain regions\(^3\),\(^4\).

After integration, we hypothesize that patterns of activity will be updated to correlate with the templates for the integrated path, and these correlations will increase as a function of run number.

**Summary**

Individuals can accurately make predictions at a range of timescales. These predictions can be updated rapidly, but improve with practice. Ongoing fMRI studies will examine how multiple timescales of prediction are supported across perceptual and memory systems.

**References**