

Standardized Format for 15 Minute Project Presentation

fMRI

Aim. To present the information that is required at the Project Review Meeting to evaluate (1) the scientific impact, (2) the feasibility and (3) the CCNi resource demands of each research project that will use CCNi resources (including fMRI, MEG, EEG, TMS and the GRID). It is suggested that the PowerPoint slides are kept to the strict minimum required for a 15 min presentation.

Slide 1. The Problem

- 1.1 Background
- 1.2 Hypothesis
- 1.3 Why is it important (what is the projected impact)?
- 1.4. Envisaged publication?

Slide 2. Experimental Design

Stimulation paradigm:

- 2.1 Participants: number, type (e.g. right-handed with normal vision), schedule (e.g., just 10 minutes on day 1; and 1 hour on day 3) , etc.
- 2.2 Conditions, or Independent variables
- 2.3 Sequence design: e.g. counterbalancing, random, 'history controlled', jittering
- 2.4 Control conditions: attentional, low-level physical, ...
- 2.5 Software: e.g., Presentation, E', Matlab, ...
- 2.6 Hardware: e.g., eye-tracker, sound stimulation, ...

MRI parameters:

- 2.7 Type of design: e.g, Block design, Event-related, fMR-adaptation
- 2.8 Sequences : e.g., EPI, DTI, ASL,...
- 2.9 Spatial coverage: voxel size, # slices, gap
- 2.10 Timing: TR, # volumes per run, # runs, overall duration
- 2.11 Options: e.g., prospective motion correction, real-time EPI

Slide 3 Analysis

- 3.1 Analysis package: e.g., BVQX, FSL, SPM...
- 3.2 ROI vs. voxel-wise approach; functional localizers
- 3.3 Fixed-, Mixed- or Random effects design
- 3.4 Pre-processing details: e.g., smoothing kernel, temporal filtering,...
- 3.5 Analysis strategy: e.g., General Linear Model, Granger Causality, ICA, Multi-voxel pattern analysis...
- 3.6 Level of confidence in mastering the above aspects and people involved

Slide 4 Expected Results

- 4.1 Expected results, e.g.:
- 4.2 activation of region X in contrast Y
- 4.4 correlation between behavioural measure Z and activity in region X, etc.
- 4.5 Strategy, e.g.:
 - 4.5.1 What would be the optimal result (high-risk)
 - 4.5.2 What would be fallback options if a) does not work?

Slide 5. Summary of requested CCNi resources

- 5.1 Stimulation
- 5.2 Response
- 5.3 Number of scanning hours
- 5.4 Analysis tools
- 5.5 GRID use?
- 5.6 Storage space

Slide 6. Ethics and grant funding