

## Go-NoGo fMRI Paradigm

The Go-NoGo fMRI Paradigm may be pulled from the iSPOT fMRI Paradigms program. The iSPOT program is comprised of software called “Stimsoft”, and has been developed by Brain Resource to run tasks during recording of fMRI data. In the attached Brain Resource fMRI Manual v1.2.1, Go-NoGo is test 1.

During the Go-NoGo fMRI Paradigm, blood oxygenation level-dependent contrast functional images will be acquired with echo-planar T1\*-weighted imaging using 3.0 Tesla GE Discovery MR750 scanner (GE Healthcare, Milwaukee, Wisconsin) with a 32-channel head coil. Each whole brain volume will consist of 45 interleaved 3 mm thick axial/oblique slices (74 x 74 matrix; TR, 2000 ms; TE, 27.5 ms; size, 3 x 3 x 3 mm; FOV, 222 mm; flip angle, 77°). For the go-nogo task we will acquire 154 volumes over 5 minutes and 8 seconds. To ensure BOLD saturation, three dummy scans will be acquired at the start of each acquisition. A high-resolution T1-weighted structural scan will be acquired using a 3D spoiled gradient echo (SPGR) sequence at the end of the imaging session for use in normalization of the fMRI data into standard space.

Verbal instructions: In this task, you will see the word “Press” appear on the screen. When you see Press in green letters, please press both of the bottom buttons of both of your button boxes. When you see Press in red, please do not press any buttons. We will have you go through a short practice before starting the real task.

