Subject: Eye Monitoring During fMRI Scan

Introduction
During a fMRI scan we want to monitor the attention of the subject by looking at the subject’s eye. We have a tentative solution until an eye tracker arrives.

Method
Our system has two cameras inside the magnet room. One camera is configured to zoom into the subject, while another camera shows a wider view of the magnet room. The camera focused on the subject’s head is used to show the subject’s eye through another mirror standing behind the head rf coil.

![Configuration](image)

Figure 1. Configuration. (A) The additional mirror for the eye (in the magenta rectangle) is attached to the 20-ch rf coil using a flexible non-magnetic arm (white color). (B) One eye is shown in the mirror inside the magenta rectangle.

Calibration
Ask the subject whether the subject can see the video camera (located toward the entrance door) through the mirror. Adjust the flexible arm.

Caution
Do not lower the patient table too much as the mirror stand on the back of the head rf coil will bump into the scanner cover.